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Cattle Department.

For the Ohio Cultivator.

The Present and Prospective Condition of Our Cattle Interests.

To one who has wintered and summered the cattle markets of the United States for the past twenty-five years, coupled with a memory which traces back so far, the fluctuations in prices of neat cattle, will be regarded as extraordinary, yet on the entire view of the case, not surprising. That the broad and fertile states west of the Alleghany mountains, and those portions of their territories lying south of 46° north, and above the cotton latitudes, have become, and are destined to remain for an indefinite period, the chief *profitable* cattle rearing and feeding districts of the Uunited States, with all intelligent men there can be little question. Their soils are fertile, and wonderfully adapted to the best pasturage grasses, and the growth of Indian corn; and their climate for the fullest development of meat stock of every breed, is genial. The stock breeders and graziers of the west are, in the main, intelligent in their business, and understand well the breeds of cattle suitable to their soils, how to breed them, and the proper foods on which to rear and bring them to their highest perfection. We consider these as settled facts, which no natural or advantitious circumstances can either overcome or compete with in our northern or southern states—for be it understood, rebellion or not, we talk of the United States as they *were*, and as they *will be* a few months hence, as it is of no use to talk about anything in the way of our prosperity, our country, or its government.

So long ago as 1834 the enterprising cattle breeders and graziers of Central Ohio and Kentucky, who drove their beef cattle afoot over the mountains to their sea-board markets, were fully convinced that the *common* cattle of the country were an unprofitable breed of animals for their puroses.—They needed something better, and they were not slow in ascertaining that England, in her long practiced improvements in all varieties of farm stock, could furnish something better than the common scrubs, which prevailed throughout pretty much all our cattle growing districts. True, some importations of improved cattle had been made many years before into Maryland, New York, Virginia and Kentuky by enterprising men, and the stock from these importations had been scattered more or less abroad into several localities, just enough to convince *thinking* men that either one or more of those breeds were required to raise our neat stock up to a *profitable* article for rearing, feeding and driving to market.

Thus, with great judgment and sagacity an association of stock breeders in central and southern Ohio made an importation of Shorthorns in 1834, and followed it in 1835, '6 and '7. These importations were succeeded by others in other parts of the country, Kentucky particularly, up to the close of 1839, when our beef markets began rapidly to fall in prices, which of course, put a stop to further importations. Prices of imported stock and their produce ranged high during this "cattle fever," too high, indeed. Nevertheless, the start was infused into many remote sections of our cattle-breeding

states, and its benefit to them was immense, in the aggregate, in inproving the race of neat cattle, proving both an economy in rearing and fattening a given weight of beef for market.

Yet, owing to causes not now worth while to enumerate, prices of beef cattle went down in our sea-board markets—and they govern all others—until neat stock was hardly worth rearing. Of course *blood* cattle prices must down also, and from 1842 until 1850, thoroughbred Shorthorns, the descendants of those imported ten years before, and equally good in quality, could be purchased all through Ohio and Kentucky, where they abounded at one-fifth to one-tenth the prices the original had been sold for. For instance: imported Shorthorns in 1835 and up to 1839 sold freely at $500 to $2,000 each. Equally good stock from them could be bought in 1842 to 1850 for $75 to $150 each, owing only to the fact, that beef was below the *producing* price in our Eastern markets.

Our country at large about the latter date, had again become prosperous. Our widely varied industrial pursuits had found their relative positions with each other, and the Atlantic beef markets rapidly rose in prices and demand; and with these increased prices came the necessity of replenishing our neglected herds of blood cattle by new importations from abroad. Railroads reaching far west from our Atlantic cities, had given our stock breeders and graziers increased and cheapened facilities for getting their cattle to market, and with that intuitive enterprise which distinguishes our western farmers, they again sought England, and drew for several consecutive years, from her best breeds of Shorthorns, and other breeds, many of the choicest animals which they had produced. It is unnecessary to name either the associations or individuals who with laudable spirit and enterprise contributed to the many importations which were made during the year 1854 onwards to 1858. It is enough to say that these animals were unrivalled in numbers and quality, and purchased by their importers without regard to price, provided their quality warranted it, in England, and they sold at largely increased prices on their arrival in this country. Their superiority for improving our common cattle for all useful purposes was so evident that no man of enterprise or means boggled at prices so long as he could command the money to secure material to breed his stock up to the required standard of excellence.

And so far our cattle breeders were wise. We do not deny that many of those imported cattle and those bred from them were sold too high, that *fancy* prevailed over deliberate *judgment* in frequent purchases.—Be it so. Yet the relative importance of a dissemination of such rare and valuable animals throughout the country has never been over-estimated, and the investments of our cattle breeders in them were, on the whole, sound and discreet.

But a rapid and most disastrous change has come over the affairs of our country. We all know what this change is, and it is unnecessary to discuss it. Beef is now comparatively low in our markets to what it was in 1854, '5, '6, '7 and '8. Yet for *prime* cattle with a good infusion of improved blood in them, not so low but what they can be bred, grazed and fed off, at a living profit by the western farmer. The highest prices—and such prices were enormous—for several years in New York, were ten to twelve cents a pound for the net quarters of first class bullocks, three years old and upwards. Now eight to ten cents are the prices of equally good bullocks—certainly a price although low comparatively, not discouraging to the careful stock grower.—*Scrubs* and *common* cattle are sold at lower prices, even five and six cents the pound, for net weight; but no *good* farmer ever ought to breed, buy, graze, or feed off, on *corn*, such trumpery for market; and if he will fool away his time and capital in dabbling with them he ought to lose money. He is entitled to neither sympathy or commiseration from any body. It costs just as much to breed, rear, graze and feed off a brute worth twenty or thirty dollars at three to four years old, as it does to breed, rear, graze and feed off one worth forty to

fifty dollars, and within a trifle as much to get him to market, and the difference in price when in market is fifty per cent. at least; and that is enough in all conncience, to pay for any difference in the original investment of procuring good bulls and cows for breeding the latter, over the contemptible trash which produces the scrubs.

Now, the moral as well as economical conclusions to be drawn from the facts above stated—and they are facts incontrovertible—are that our stock breeders who possess good cattle of approved blood, should feel no discouragement as to their future value, and they should not sacrifice them at low prices. We know they feel sore in looking over their choice and long cherished herds which will not sell for over one-fourth or at the highest one-half the prices they obtained for them three or four years ago.—But they can look around them and see other descriptions of property equally depreciated in value. Fluctuations in the price of all commodities have always occurred. They are up for a series of years, they are down for another series, and so we go. There never was a time since the discovery of this continent when our western farmers made so much money, or in which their real estate increased so rapidly as during the last ten years previous to 1858. Their ideas had got too high, and with the sudden reverses of 1858, and since, they have become too low. To our stock breeders of past years particularly, we may apply the scriptural remark,—"Jeshuran waxed fat and kicked;" or rather according to the rendering into metre of an old Puritan versemaker:

"Old Jeshuran he waxed fat,
And down his belly hung,
Against the law he kicked at,
And up his buttocks flung."

The "belly" has lately been drawn up; but it will dilate again in good time, and that time, we apprehend, is not far off. Half a dozen of our northern states now possess more choice Shorthorn cattle than all England can boast. With *good care* of this stock, we are now, and can remain independent of any other drafts of neat cattle from England or any other foreign country for all coming time; and it should be a matter of rejoicing to every American stock breeder that we have within our own possession the material for an enduring course of prosperity in such an important branch of our agriculture. L. F. Allen.

Black Rock, N. Y., 1862.

The Dairy.

Spring Treatment of Dairy Stock.

In the latter part of February and early part of March, cows will begin to come in milk, and if expected to yield the best returns through the season, will require extra food and care. They should be protected from the cold, and not exposed to storms. They will need in addition to a full supply of the best hay (which should have been selected and put up expressly for their use at this season) a feed of some kind of grain at least once per day. Roots, also, are of great service in spring feeding, not only increasing the quantity and quality of the milk, but in keeping the animal in a better state of health. Carrots, all things considered, are to be preferred for this purpose.

In cheese daries, buckwheat, rye or barley meal, oats and peas ground together, are considered among the best grains for spring feeding. They are richer in vegetable casein than corn, and their constituents seem to be in better proportion for keeping the animal in strength, and supplying material for milk, and replacing that which is being carried off by the natural waste of the body.

The objection to corn meal is, that it is of too heating a nature for milch cows; it makes the animal feverish, and dries up her milk, and hence the majority of our dairymen prefer other kinds of grain. Some idea of its nature may be had from the result of experiments made with it in warm weather, by Mr. L. B. Arnold, of Fairfield, N. Y. He says: "The milk from my cows fed with corn meal, in July, 1860, was badly injured, and the cream ropy."

The feeding of milch cows in spring, requires judgment and experience. One thing however, should be borne in mind; the cow must not be suffered to run down, to become weak and exhausted, but should be kept in strength, so that on turning to grass she will be in her full health and vigor, and in con-

dition to give the largest quantity of milk and of the best quality.

Sometimes when the cow has been fed through the winter on straw, poor hay or food that is not nutritious, she will not come in well, but after calving will be troubled with retention of the after-birth. This arises often from eating too much in bulk, for in order to get a sufficient supply of nutriment, the animal is forced to consume a large quantity of food, which pressing against the uterus, gets up an irritation in the parts, and causes the placenta to adhere to the sides of that organ. When this happens, the cow is more or less injured for milk, for a part or the whole of the season, and sometimes from improper treatment, permanently.

It is doubtful whether any advantage is gained in removing the after-birth by introducing the hand for that purpose, even though the operation be performed by a veterinary surgeon; at any rate it should never be attempted by an unskilful person.—Warm slops of oat meal may be given, and warm applications placed along the spine and on the hips, these with the assistance of nature may soon remove the difficulty.—The following is vouched for by reliable persons in this vicinity, who have tried it and found it to prove efficacious: Take nearly a pailful of wheaten bran and cider vinegar sufficient to wet it, bring the vinegar to a boiling heat and scald the bran with it; this after it is sufficiently cool, given to the cow, will usually effect a removal of the placenta in twenty-four hours. The cow will readily eat the mixture, and there is no danger to be apprehended from its use.—But a "preventive is better than a cure," and cows that are well cared for, properly fed and kept in health, will seldom or never be troubled with this difficulty.

When cows are calving, the dairyman should have several spare stables where the animal, separated from the herd, is turned in and allowed to remain loose for a short time. Immediately after calving they should not be exposed to cold winds, or storms of snow or rain, and at least for twenty-four hours afterwards, should not be allowed to drink of ice cold water; give them water sufficient to slake thirst, but with the chill taken off, and when the weather is fine they may be suffered to roam in the yard. If the udder is swollen, inflamed or feverish, bathe it freely with cold water; this is always safe, and generally more efficient than unguents and liniments, which are often liable to do more injury than good. Whether the calf is to be raised or not, it should soon be separated from the cow; she will forget it sooner, and by kind words and treatment become attached to her attendant, manifesting a desire to be milked.

Nothing pays better than kindness towards animals of the dairy. Never throw a stone at, or strike, or irritate a cow, or speak harsh to her; it does no good and much may be lost. Milk rapidly by grasping the teat and pressing gently but firmly, and avoid lugging down and stripping.—The milk should be all drawn from the udder; this is important, for a first class cow partly milked, soon degenerates into a second and third rate milker.

No conversation should be carried on by the milkers while milking, as this, besides irritating the animal, must necessarily break in upon the work, prolonging it, and thus giving a habit to the cow which will operate during the season in lessening the yield of milk. The milker should be in close contact with the cow's body, for in this position she will not be able to inflict a severe blow whenever she may feel so disposed. The udder and teats are highly organized and sensitive, particularly in young animals, and they often suffer great pain and even torture from the harsh and careless manner in which they are milked; many a young animal has been rendered refractory and vicious from barbarous treatment in this respect.

He who starts with the intention of producing a large quantity of cheese from his herd, must not only have good cows, but must attend closely to everything connected with the business. His stock must have been well wintered, regularly supplied with an abundance of nutritious food, pure water, and proper care. They must be gently and kindly treated, never worried by dogs, never hurried along or over-driven, nor confined in damp or unventilated stables; and finally, the operation of milking must be thoroughly performed by trusty and experienced hands.

ABORTIVE COWS.

The disease, or habit of abortion among cows, has, within a few years past, made its appearance in certain dairies in the northern part of the county, and seems to be each year spreading and increasing; so much so, as to cause serious alarm among many, as threatening to break up the business of dairying.

This habit is more alarming, from the fact that the causes producing it are not fully understood; and hence no precautions can

be taken with certainty to avoid it. The habit thus far has shown itself only on the oldest dairy farms of the county. With some, the whole dairy has been broken up, while with others a part of the cows comprising the herd have aborted; but generally in such numbers as to show it to be not the result of accident. The time of aborting occurs from the third to the seventh month after pregnancy, and the habit has usually shown itself in the best milkers and younger animals of the herd.

The loss is a serious one, since the animals cannot be used with profit in the dairy for the season following, and if disposed of in the spring, cannot be sold for anything beyond the cost of wintering. When an attempt is made "to milk up" the aborting cow and use her in the diary, it is questionable whether the milk should be used, as being more or less diseased and unwholesome. In 1859, I brought this subject before the Farmers' Club at Little Falls, and suggested that some measures be taken to collect facts in relation to the habit, with a view of ascertaining its cause; and in February, 1861, I requested Mr. Arnold of Fairfield, to give the Club the result of his enquiries. In his report on the subject, he presents the following facts as worty of attention:

"First. Excepting cases of accident, abortions have occured only on farms that have long been occupied as dairy farms; generally on farms that have been so occupied from forty to fifty years and upwards; or not less than thirty years; while some of the oldest dairy farms are exempt.

"Second. The time of aborting has been from the third to the seventh month in the period of gestation.

"Third. The best cows in the dairy have been the most likely to abort, and heifers oftener than adult cows.

"Fourth. Upon the farms where the cases are the most numerous, the limbs of the young calves are generally very flexible and a longer time than usual is required to enable them to walk firmly, showing a want of solidity in the substance of the bone.

"Fifth. In cases that have failed to give milk from aborting and have soon after fattened for beef, patches of the periosteum, especially upon the vertebræ and ribs, have appeared diseased and carious.

"Sixth. When abortions occur before the middle of the period of gestation, the cows in some dairies are in heat in a few days afterward, no matter in what season of the year.

"Seventh. Some farms have been found where the pastures are composed of new land, and the meadows of land long tilled and worn. On these, abortions occur only in winter. But when pastures and meadows are worn alike, they are as likely to occur in the fall as winter."

That there are exciting causes which might and do produce abortion, it is well understood; such as foul air in and about stables; fright; worrying by dogs; defect in the sire; being driven or hooked by master cows; slipping and falling on the ice or frozen ground; the eating of poisonous herbs; sympathy from seeing the mishaps of other cows, and various other causes, a part or all of which have existed on the same farm for years without producing the same result. But if it be from any of these causes, why should it make its appearance *now* more than formerly? From an examination of all the facts presented in dairies where it has occured, there is good reason to believe that the cause of this disease lies beyond the exciting causes above enumerated.

Whether it is the result of long continued dairying on the land, whereby some essential element of soil has been extracted, and carried off in butter and cheese, and has not been replaced, time and experience will doubtless make manifest. I do not propose to theorize on the subject; it is sufficient for me to say, that none of our dairymen are able as yet to account satisfactorily for this comparatively new habit of abortion in our dairy cows; and I have alluded to it in this paper in the hope that it may meet the eye of some person who has had similar cases coming under his observation, and may have discovered the true cause, and the means of averting it, and will give the result of his investigations to the public.—[X. A. Willard, *Herkimer Co., N. Y. In Trans. N. Y. State Ag. Soc.*]

How the French Choose Horses.—Horses are purchased for the French cavalry, according to Gen. McClellan's report, at from four to seven years of age, and must be of French origin. The animal is brought to the commandant of the remount depot, and submitted to his inspection without any price being named, If the commandant finds him unsuitable, he is at once rejected; if the contrary is the case, he is brought before all the officers of the depot for a thorough examination. Each officer then writes his estimate of the value of the animal on a slip of paper; these papers are placed in a hat and shaken up, so that the estimate of

each officer may not be known; the mean of these estimates is then taken, and the commandant offers that price for the animal. If the owner accepts the offer, the price is paid at once; if he refuses, the horse is sent away, for no bargaining is allowed.

The Horseman.

For the Ohio Cultivator

The Chest of the Horse.

The chest being the repository of the organs of respiration and circulation—the lungs and heart, the grand point of consideration of the horseman in judging of a horse in respect to it, is form or its capacity; the one being inferred from the other. It is natural to suppose that the largest lungs and heart inhabit the largest chests and that horses possessing them must also enjoy advantage in wind, as well as such other advantages as are found to accrue from an ample respiration and circulation and endurance, as also his constitutional disposition to make and maintain condition. Capacity of chest will be derived from breadth, depth, and length of the cavity.

Breadth of chest is the result of circularity in the arches of the ribs; hence a broad and circular chest, amounts to the same thing, or have only this difference; that the breadth not always being in the part where it ought to be may be present without or with only a part of the curcularity. A horse that has a circular chest with thick or strong shoulders, and a broad back and breast; but in another the ribs may curve well out from the spine, giving breadth of back and thick shoulders, then turning suddenly inward and proceed to the brisket with hardly any further curvation; such a formed chest is defective, not only in depth, but in width likewise, except just at the upper part. When the ribs proceed from the spine to the breast-bone with very little arch or curvature outwards, the animal becomes narrow chested, or what is termed 'sided.

A broad or circular chest being that which affords the most internal space, most room for the contained organs out of which results wind and strength and stamina, it has ever been, throughout the animal world, considered a point of the greatest desideration. And to the horseman it is no mean advantage for him to possess a horse with good stamina—strong wind and constitution; one that will do double the work of another and do that work upon comparitively little provender. But can the horse with the circular chest perform—make use of his limbs—as well as one with a chest differently formed? Can he go as free and as fast? The breadth of his chest will be disadvantageous to the action of his fore limbs, and therefore, we may be content to make a sacrifice in one respect that we may be gainers in another.

Nature however, in this apparent dilemna has made a provision by giving depth of chest; a foundation which greatly compensates for deficiency in breadth; while it enables the animal to use his fore limbs with all the fredom and effect required. Be sure to look for plenty of depth of chest; it is a most important point, where we can have depth or circularity; and where speed or action is demanded.

No where in nature is the design of this or that form of chest more strikingly and beautifully shown than in the different breed of horses. The draught horse is admired for his fine, round barrel and his broad, full breast; the running horse, for his great depth of chest, without that breadth and consequent seposition of the shoulders which would diminish his facility of progression. Observe how awkwardly and clumsily the dray horse gallops or even trots, and with what agility the thoroughbred glides along in his canter or speed. Only exchange their chests, and mark what would happen; the one would be all abroad in his gallop, and could not go any pace at all—the other has not the substance about his shoulders and neck, a horse for heavy and laborious draught ought to possess. Length of chest in general is not a desirable point in a horse, because it is commonly combined with shortness of ribs, and conse-

quent deficiency in the vertical diameter of the cavity, or else with flatsideness and narrowness of the area. Where, however, we find the ribs of their requisite length and proper span, and where the interval between the last rib and the hip bone is but short, which by horse people is called being ribbed home, or well ribbed up—then the length of chest is what all judges in horses will not fail to admire. Depth and length, and breadth of chest, with other structures in accordance, will ensure enduring speed, with wind and bottom in its possessor. The breast, as the front part of the chest is called, is a point worthy of attention. It should possess breadth and fullness; the breast bone should be prominent, and the sides of it well filled in with plumpness; the action of the fore limbs, as we shall see by and by, a good deal depending upon the formation and substance of the breast. When the breast is wide, the fore legs will be far apart; on the other hand, when the breast is narrow, the fore limbs are approximated. This conformation favors speed, but on several accounts is highly objectionable. When the breast is narrow, the chest is so likewise; the animal is flat-sided, and his fore legs are placed so near together that, in action, they are continually striking each other, occasioning sores or lumps upon the fetlocks, and other annoyances, not to mention the weedy make and want of stamina such a horse will evince. Although we may not require—had rather not have—a broad chest, yet cannot the breast be too fleshy or prominent. A lean breasted horse cannot fail of being weak in his fore limbs. When I speak of prominent breast, however, I do not mean one that projects so much forward that the fore legs appear to recede from it underneath the body, making the animal what is called "stand over;" for this shows faulty position of the fore limbs, and a sort of unnatural lengthiness about the breast, which cannot but prove disadvantageous in progression.

Zanesville, O. T. WEBB, V. S.

Nothing is humbler than ambition when it is about to climb.

The Farm.

Domestic Beet Sugar.

At the recent session of the Ohio State Board of Agriculture. Prof. A Mot, of Columbus, submitted the following papers concerning the practicability and economy of making sugar from the beet root in Ohio:

To the Ohio State Board of Agriculture.

The subscriber begs leave to submit the following remarks:

The State of Ohio could raise her own sugar and export a surplus, notwithstanding failures in former attempts.

Scepticism is the main obstacle in the way; to remove this, nothing will avail except a successful, practical, *public* demonstration, on a large scale; this ought to be encouraged.

The consequences of beet cultivation are:

1st. To increase from *one* to *ten*, the number of horses, cattle, and sheep.

2nd. To supply the land with immense quantities of phosphate (bone black) and other residues, all favorable to wheat.

3rd. To relieve a State from sugar importation.

4th. To give expansion to metallurgy and machine shops, by the demand for new implements.

5th. To introduce a profitable industry in which all branches of natural sciences find application.

It has been affirmed that $60,000,000 could be added to the annual production of the State, by substituting beets for corn on 300,000 acres; this could be done in less than ten years.

To reach this desideratum, France applied energetic means; in the midst of *general war* she offered a premium of $200,000. Beet sugar was *immediately* taxed and has been so ever since; this tax now *reduced* to 2½ cents per lb. yields $6,097,070 for beet sugar alone, and probably $2,000,000 for molasses.

The declining fertility of the soil in Ohio, and the pressure of the times call for decisive action; therefore the subscriber respectfully suggests that the State authorities

be requested to offer a premium, (liberal and commensurate with the interests at stake,) to be awarded "to the first person having planted within the State, no less than five acres of beets, and having made therefrom no less than 5,000 lbs. of fair, merchantable, crystalized brown sugar."

Will those having charge of the commonwealth apply the proper means, or shall another State have the advantages of present opportunities?

In competition for the premium, which is offered for the most valuable experiment on sugar and syrup, the subscriber respectfully submits his specimens and the detail of his operations:

The most valuable experiment is that whice opens the way to the greatest profit. The included extract from the *Field Notes* demonstrates the "importance" of beet sugar, and the possibility of its profitable production in Ohio.

The seeds for the subscriber's experiments during the last four years, were mostly supplied by the obliging Secretary of your Board.

The calculated production of beets averaged 30 tons to the acre; a parcel of seeds planted in the garden of G. M. Parsons Esq., of Columbus, yielded at the rate of 65 tuns to the acre; a specimen of this crop is herewith submitted with the offer to make sugar therefrom in presence of the Board.

Experiments in making sugar, were more or less successful, according to the kind of beets; the white French beet gave the best results; the percentage was low, owing to the want of implements; it was in average 4 parts of sugar and 6 parts of molasses on 100 parts of beets.

The specimens are—

No. 1. Raw beet sugar in progress of crystalization; the dark color belongs to the molasses; this being removed, the crystals will appear with a light brown color, similar to No. 3.

No. 2. Beet molasses drained from specimen No. 3, and filtered through French woolen stuff of the adjoined pattern.

No. 3. Brown beet sugar extracted from white French beet, raised near Newark, (Cherry Valley) Licking Co.; seeds from the Board of Agriculture.

No. 4. Clayed beet sugar partly refined, from white French beet, raised in the garden of G. M. Parsons Esq., at Columbus, Ohio. The refining operation could not be perfected for want of machinery.

No. 5. Sorgho Syrup from the half of one cane; it contains neither gluten, acid or essential oil; it will not ferment; process as usual, except removing the rind of the cane, and filtering with bone black and woolen stuff. With a large evaporator, a golden color or even white may be obtained.

The detail of the operations was:

	How it is done in Factories.
1. Washing the beets by hand.	By a washing machine.
2. Rasping the beets with a tin grater.	By a rasping machine.
3. Pressing the pulp in a cloth.	By a hydraulic press.
4. Heating the juice to 85° C., then adding 1 per 100 of lime, diluted; heating to 100° C., then allowing rest to complete defecation.	In large kettles.
5. Filtering the juice with bone black.	In coarse filter.
6. Boiling juice down to 24° B.	In large evaporator.
7. Filtering syrup with bone black.	In fine filter.
8. Cooking syrup to 45° B.	In vacuum pans.
9. Cooling the sugar in a cup.	In a vat.
10. Placing sugar to crystalize.	In cones in hot house.
11. Draining off the molasses.	From the cones "
12. Drying the sugar before the fire and packing.	By steam "

The subscriber claims no merit of invention, his "modus operandi" being the reproduction (in a small scale) of that which he had occasion to observe in the factories of Europe.

A. Mot.

Raising Onions.

[John Gregory of Marblehead, Mass.—the great old Garden King of Hubbard Squash and Cabbage fame, writes the following chapter on Onions, for the Boston *Ploughman*:]

Fifteen or twenty years ago, when Uncle Tom Fowler came into Marblehead, our farmers devoted their acres principally to hay, corn, and such standard crops as are grown on country farms.

Cabbages and onions, which are now our standard cash crops, were grown to but a limited extent, the latter not much beyond the quantity required for the ordinary wants of the family. The old man leased a farm and settled in our midst. He soon inquired of his neighbors why they did not raise onions. They answered that their soil was

not naturally adapted to the crop, was too poor, and of too heavy a nature.

"Well," said he, "you may say and think what you like, but I'm going to raise hinyuns!" And at it he went, transplanting to our American soil the wealth of knowledge and experience acquired under the system of high culture pursued in the old country, and the result was such as nature usually bestows on such investments, success; the old man grew his "hinyuns."

Whatever returns the onion crop has made to our Marblehead farmers, who now raise from one to twelve acres each, are due to a great degree to the knowledge and enterprise of uncle Tom Fowler.

The onion thrives in a soil naturally strong, rather light in structure, and well drained. Those who have soil of this character, by observing with care the following directions may reasonably expect success, unless the maggot disease known as "rust" should appropriate the fruit of their labors.

Let the ground selected be kept in a state of high culture four or five years from the sod, the last one or two years to carrots, an excellent crop to precede onions. Accumulate in the course of the winter, strong manure, at the rate of from ten to twelve cords to the acre. For this purpose nothing can be better than muck and night soil, at the rate of two or three parts of muck to one of night soil.

Let the compost be pitched over till it is *most thoroughly mixed and fined.* Cart on the manure in small heaps, spread and plough under from four to five inches in depth, then cross plough and cultivate or harrow. Now rake the bed finely with a hand rake, in strips of about six or eight feet in width, and as fast as raked plant in rows fourteen inches apart, using three pounds of Danvers early yellow onion seed to the acre.

As soon as the seed is well up slide between the rows with the onion hoe, and in the course of ten days or a fortnight slide again, which should be immediately followed by a careful hand and knee weeding, the weeders proceeding on their hands and knees, with a sharp stick or knife to eradicate twitch grass.

This weeding must be soon followed by a second hoeing, and this again by weeding. The rich soil in which onions are grown is a perfect hot bed for weeds and requires constant oversight lest the plants be overgrown, or the weeds acquire such size as to start the onions when pulled.

Three hand and knee weedings, four slidings with the onion hoe, (the wheel hoe is best,) and two hand weedings, will usually be found necessary. In the latter part of the season, when the plants begin to bottom down, the pursly comes in. This should be attended to with basket in hand to be carried out as soon as pulled, as it is apt to reroot and make much trouble. If the onions appear to be backward in "bottoming down," as the drying of the leaves is termed, roll an empty barrel over them, taking two or three rows at a time. When the tops are about dry pull and throw them together, three or four rows into one, and rake over once or twice each day until the tops are well dried up, then trim with knife and they are ready for market. Most farmers do this work in their barns. If the crop is backward when pulled they may be left out through heavy frosts, and even light snows, as the onion is a very hardy vegetable.

Let it be remembered, that other things equal, the highest manuring *gives the earliest onions and fewest scullions.* I have seen 900 bushels grown on an acre without a bushel of scullions in the lot; and half an acre that did not yield 20 bushels of good onions almost the entire yield being but scullions, by which term is meant onions that were developed entirely in top growth, forming no bulbs, and keeping green till frost finishes them. Both of these crops were grown within a short distance of each other, on soil and locations equally propitious, the result turning almost wholly on the difference in manuring.

Should the seeding of the ground be deficient, the onions will be large, coarse, and not readily marketable; while a liberal seeding of three pounds to the acre will allow a proportion for the maggot, whose destructive inroads have almost banished the crop in New England, from a latitude north of Boston; but let not our enterprising farmers be discouraged, as experience has developed that the law of increase of this pest has its exceptions in some localities, where its attacks were less destructive last season than the season preceding.

Onion seed is one of the kinds that rapidly deteriorate with age; the majority of farmers planting only that of the growth of the preceding season, though that of two and even three years of age, when kept with care, has retained its vitality. If this and other varieties of seed were kept in a dry state, where their hygrometic condition was constant, as in a vessel from which the air has been removed, they would doubtless retain their vitality through a much longer

period than is common under the present want of system.

The "Rust," a disease of the leaves of the plant, is common in localities where the onion has been raised for a long series of years; the best remedy is a supply of new soil, brought to the surface by deeper ploughing, or supplied from other localities. If sea manure is very liberally applied, the result is a coarser quality of onion, and a later ripening of the crop.

The large red onion is an early variety, and excellent keeper, while the flat onion finds a readier market and brings a higher price per bushel than either the red or Danvers yellow; but, on the other hand, it will not yield so heavy a crop, and the variety now in the market known as the Rhode Island, is considerably later, so late in maturing as to make the planting of it an investment of considerable risk. I am informed that there is a variety equally early with the Danvers, but have yet to find it. It may be well to note that the flat onion begins to bottom at a period in its growth rather later than the other varieties; hence farmers before considering their crop but one of scullions, should first be certain of the variety of seed planted.

I knew of one instance where a farmer, looking on his growing crop as an utter failure, offered to dispose of it for a few dollars, a crop whose final yield was over two hundred bushels of the flat variety.

A single word about the cooking of the onion, and I will close. Select medium size, hard ones, boil in cloth till they are quite soft (they are usually brought to the table in a hard, unpalatable condition,) then mash fine and add butter and a seasoning of salt and pepper.

I wish I could indite some panacea to save many precious tears shed in the preparation of this healthy vegetable; whether tears of anger that their lords will indulge in such pungent food, or tears of compassion as they sway the merciless knife, I leave the ladies to decide, only begging that they will save them—if they can!

JAMES J. H. GREGORY.

Marblehead, Mass.

Business in the Hoop Pole Region.—Large quantities of staves, and hoop-poles, are being drawn out, ready for the opening of navigation. The sleighing is excellent and people are generally improving it to good purpose, as the once vacant lots and railroad can testify.—*Perrysburg Journal.*

The Orchard.

For the Ohio Cultivator.

DWARF APPLES.

The above is intended to illustrate a dwarf apple tree three or four years old, in bearing. These little trees are especially adapted to the garden and limited grounds.

Standard apple trees should never be planted in a garden or in a city or village lot.

By the introduction of only a few standard trees, whose wide spreading branches and roots, shade and exaust the ground, the entire garden is in a few years spoiled for any other purpose. Dwarf trees are alone suited for such places; these will but slightly interfere with the other products of the garden.

The dwarf apple tree, like the dwarf pear, may be moved safely when of bearing age, and it is not unusual to send trees from the nursery, full of blossom buds. Where one is in haste this may do, but trees one or two years old will generally give the best satisfaction. By observing a little care in pruning and training, these miniature trees may be made objects of beauty, thus adding to the ageeableness of the garden. They crowd into bearing very young and are exceedingly productive, occupying so little space, a number of varieties may be grown on a small piece of ground.

Dwarf apples are produced by working any desired sort upon the Paradise apple, a French species of very dwarf habit, which bears a small sweet apple of no value. All varieties of the apple seem to do well on

this stock, uniting freely, assuming a dwarf habit, coming early into bearing, and the fruit often of increased size.

Winter apples are usually so abundant as to be easily purchased at moderate prices. The supply of fine early sorts never equals the demand, beside many are too delicate and tender for long carriage to market.

These early sorts then should be chiefly planted in the garden. For the sake of novelty and ornament the largest and high colored varieties are often chosen.

The roots of these little trees being near the surface and all within a limited space, it will readily be seen that they need *good* culture. Annual dressings of manure in the Autumn, mulching in the spring, with thorough pruning will insure the best results.

We gathered a peck of fruit large and fair, from a little tree only the third year from planting, and a half bushel the fourth. It is now eight years since it was planted, and it continues vigorous and healthy, producing annual crops. A. G. HANFORD.

Columbus O. 1862.

For the Ohio Cultivator.

Raising Peaches for Market.

Best Varieties for Southern Ohio.

About four weeks since, after spending a few days among the peach growers of Warren and Clermont counties, I was present at a meeting of the Cincinnati Horticultural Society and made some remarks on the selection of varieties of peaches for market a brief report of which was published in *Field Notes* and other papers, and has induced several young fruit growers to ask my advice on this subject.

A gentleman who was largely engaged in the shipment and sale of peaches the past season, told me that in his opinion the crop of this fruit in Warren and Clermont counties, would have sold for one-third, or $20,000 more, if the varieties had been all of the best, and well proportioned as to time of ripening, so as to give a fair supply for about three months, instead of nearly all ripening in three weeks.

All who have observed the matter at all, must have noticed the scarcity in our markets of good early and late peaches, while there was quite a glut in the midst of the season. Dr. Jas. Taylor of Newport stated, at the meeting above referred to, that he last year sold his earliest peaches at $5 per bushel, the second at $3, and the third at $1.50.

I will here give a list, nearly in their order of ripening, of such varieties as I would choose for a first rate peach orchard.

1. *Hale's Early.*—This new and very early variety is not generally known as yet, but seems likely to prove the best of all the very early sorts.

2. *Troth's Early* is a very popular Jersey peach, generally counted as first of market varieties; but I was told that it had failed the past season around Lebanon.

3. *Cole's Early Red* is next in season, and superior to Troth's in color; hence quite popular.

4. *Early Tillotson* is approved by some, but the fruit is too tender and juicy for carrying far to market, and like its parent, *Serrate Early York*, the tree is rather tender and a poor grower.

5. *Cooledge's Favorite* is another of the Red Rareripe class, and exceedingly hardy, productive and profitable.

6. *Yellow Red Rareripe* is the earliest of the yellow flesh class. It is very productive, of good size and quality, quite handsome, and bears carriage well—none more profitable.

7. *Barnard's Yellow Alberge*—similar to the last, but larger and a trifle later—just preceding,

8. *Crawford's Early*, which is everywhere the most popular of all market peaches, owing to its size and beauty.

9. *Large Early York* is the best of the white fleshed peaches at this season, and far superior in flavor to the yellow kinds, though not so good for distant carriage.

10. *Jacques' Rareripe* is valuable as intermediate between Crawford's Early and C. Late, which it closely resembles.

11. *Red Cheek Malacoton* is also approved for this purpose, and is quite handsome and good.

12. *Crawford's Late* has precedence of

all in its season, for beauty and size, firmness, &c.

13. *Old Mixon Free* is a much sweeter and richer peach, and sure to find purchasers among those who are not misled by mere show.

14. *Morris White* or *Heath Free* must always be popular, especially for preserving, &c., but should not be planted too largely.

15. *Old Mixon Cling* is the best of all clings, and as it is very productive, handsome, and bears carriage well, it is quite profitable.

16. *Stump the World* is a very handsome new peach, flesh yellowish white, and of finest flavor; said to be very productive and profitable.

17. *Heath Cling* cannot be dispensed with, as its beauty and lateness make it quite profitable.

18. *Scott's Nonpariel* is considered the latest of the deep yellow class (with red cheek) to follow Crawford's Late.

19–20. *Smock's Free* and *Lagrange* are among the latest and best of freestone peaches, and popular market varieties, but are deficient in color.

21. *Ward's Late Free* is of the same period and quality, and sells better in market on account of its bright red cheek. It ought to be better known.

Of the foregoing list, Nos. 4, 11, 16 and 20 might perhaps as well be omitted, if the others are included, in a section. We have a dozen or more other kinds in the nursery, some of which might prove quite equal to the foregoing, but we cannot so confidently recommend them except for the use of amateurs.

M. B. Bateham.

Shot by a Dog.—A few days since, while a party were out hunting, a Mr. Ashcraft, of Pike township, was accidentally shot—the ball entering below the chin and passing out at the top of the head. He died immediately. The discharge was caused by having his gun standing by his side, while his dog was playing with him, when the dog lighting on the cock of the gun, discharged he same.—*Coshocton Democrat.*

If pride leads the van, poverty brings up the rear.

The Garden.

Strawberry Convention.

WHAT STRAWBERRY IS THE BEST?

It is easier to answer the above question than to satisfy the many querists that we are right; for there are so many things to be taken into account that a berry suited to one person's wants and soil, would be unsuited to another's. To one who raises for market, it is essential to select such a variety as will yield a surplus of one hundred or more per cent. on its cost of cultivation. To the amateur, the cost is not so much an object as the size, beauty and flavor of the berry. At this time, when over one hundred different varieties of strawberries are grown under distinct names, each one of which has its claimant for superiority, the difficulty of selection is more than at first supposed; for when we have named *Triomphe de Gand*, because of its size, beauty and delicious flavor,

WILSON'S ALBANY,

Steps in, and says, "Pooh! I produce two quarts of berries to that lady's one; and if my berries are not quite so highly polished, or so sweet, yet they sell nearly as well, and the quantity is so much greater that my owner is fully satisfied of my value." Now, up jumps

HOOKER'S SEEDLING:

"And may it please you, my good friends, who have just spoken, have told but the truth; and all very well, I presume, for the kind of society with which they have to deal; but I belong to a higher grade, and although I cannot endure jolting rides, yet when I am carefully gathered and placed upon the tables of the judges, I find everybody calls on me again and again, and each time with such a peculiar twinge of the mouth that I am led to believe they appreciate my delicacy above all others.—Again, I am not niggardly in yielding; to those who care well for me, I am bounteous in return; but I cannot bear neglect in my body."

THE "DOWNER"

Here steps forward, and says: "Although originated in a State where now there is more or less of disloyalty, I am true to all the interests of the North; require no petting or extra care to keep me fresh and vigorous, and am disposed to yield a large and bright fruit, of a fine flavor, not quite

equal to my friends, Triomphe de Gand, or the last speaker, but so firm that transportation, even over long distances, does not injure my looks. My numbers, also, are nearly as great as my friend 'Wilson.'"—As the the "Downer" sits down,

LONGWORTH'S PROLIFIC

Rises and addresses the meeting much as follows: "Although not having received the hundred dollar premium by a noted society of pomologists, yet I may say without egotism that it is conceded by all who have had my acquaintance two or more years, that to me rather than *McAvoy's Superior* should the award have been given; for I am not so easily affected by changes in climate. I produce more berries, and they equally as large and of as good color; and although they are not quite as delicate and aromatic, yet their firmness and sprightliness are such that I am generally preferred when berries as sought to be grown for market, or for the purpose of sugaring for desert. Again, I find myself much liked for canning."

JENNY LIND,

Not the singer, but a strawberry with that world-renowned name, next modestly remarks that "she could not boast especially of size, modesty if nought else, would forbid; yet she could claim, with all due deference, that she is an early riser, and for early maturity and productiveness few can excel her; and her firmness and sprightlyness are qualities she had never heard controverted. She felt therefore, that although she did not wish especially to press the matter, yet any gentleman would find his domestic garden sadly deficient without her presence."

THE OLD EARLY SCARLET

Here popped up in high dudgeon. "She had been for many years the first to show her ruddy cheek at the season people began to look for the visits of strawberries, and now to have her claims disputed by a foreign named lady, was too bad; although she must in justice acknowledge that lady had not overrated her merits. She, however, desired her listeners to to think twice before leaving her behind. They would find her berries abundant and of delicious flavor, although she could not boast of size; but she had always performed two offices, viz: that of bearing her own burden, and at the same time assisting Mistress *Hovey*, and others of her class to perfect their works." As the Early Scarlet concluded,

HOVEY'S SEEDLING

Arose and said "she had now been over twenty years before the public, and although she had almost invariably reigned supreme at all exhibitions, and generally was ranked highest on the market grounds, yet she had the effrontery to say she was unwilling to yield the chaplet of honor to any of those with whom she was acquainted, and her list of acquaintances counted up something over one hundred names. She would say that for sprightliness some of her rivals outshine her, while others had more aromatic delicacy; but when all the qualities were combined that are requisite to form a good strawberry, she thought ere any one discarded her, they would look the matter over very carefully. She said she loved good care and good feed, as who should not; but no one ever yet complained of her when they had treated her liberally to such items as strawberries ought always to have."

THE PYRAMIDAL CHILIAN

Here begged leave to remark, that "she noticed a great many of her associates standing with open mouths, ready to speak, and as she knew they could not all have time to tell their neighbors' faults, much less get through with their own praises, she would move an adjourment; but before all had gone, she should say it was her character to be a little retiring; and while her associates were ruddy with fruit, she only exhibited her blossoms; but after her friends had exhausted their stores, she exerted herself, and she believed with great success, to prevent too great depression among their lovers, by supplying their wants until some other variety of fruit came naturally into use."

TROLLOPE'S VICTORIA

Here jumped up and said that "before the meeting adjourned, she would like to ask some friend to grow her along side of *Methven Scarlet* another season, and report how far she excelled that once highly reputed berry."

E., *in Ohio Farmer.*

A Good Shot.—James Clements, Esq., of this place, one day last week, after "flushing" a covey of partridges, killed fifteen of them at one shot. This is the best shot we have ever heard of, and we think we may safely say that it cannot be beaten by any sportsman in the State. Will our friend Harris of *Field Notes* please run his scissors around the above and "make a note on't."—*Bucyrus Forum.*

The Planting of Small Fruits.

The value of the small fruits begins to awaken more and more attention year by year. Around our populous cities even large farms are planted with them throughout the rural districts many private gardens abound with them.

Under this head are included Grapes, Currants, Gooseberries, Raspberries, Strawberries, Lawton Blackberries and such other fruits as occupy but a small space, and which every family may enjoy which owns a garden. When these are properly planted and cultivated they yield a very profitable crop on a small spot. Other considerations also recommend their cultivation for every household. For Strawberries, Gooseberries, Raspberries and Blackberries come in a grateful succession, during the two months of June and July, when few or none of the larger fruits can be had. And when the other fruits are cut off by Spring frosts, these, which bloom later, generally escape and furnish us with a valuable substitute, especially as they are easily kept in sealed cans from year to year.

As a most palatable and wholesome luxury, who, that knows what good things are, will despise a dish of Delaware grapes or a dessert of Raspberries smothered in cream? Why, the wealth of Kings can purchase nothing better for their tables than these delicate and delicious viands, which the poorest man may grow in his own garden. As these delectable things can be secured only as the reward of some care and labor, I will proceed to show, in the rest of this article, how plats, strips and borders of ground may be prepared for cultivating them with the greatest success. And though my directions are intended to guide in preparing a strip to be planted with grape-vines, they will do equally well where the intention is to plant any other kind of the small fruits—the difference being only in the shape or extent of the beds, and not in the mode of preparing the soil.

For planting grape-vines in the Spring prepare your ground, if possible, during the Winter. And let it be so situated that your vines will have an open exposure to the sun. To grow grapes for the table, the vines generally trained on a trellis, and the ground for this purpose should be a strip or border from eight to twelve feet wide, and in length according to the number of vines which you wish to plant in a row at the distance of eight feet apart. Having selected and laid out your ground, begin by spading out the soil a yard wide across one end of the strip and to the depth of at least two feet, and pile it on the surface of the ground beyond the end of the strip. You have now a pit dug out a yard wide and two feet deep. Now throw in a good spread of well rotted manure and dig it into the clay at the bottom. Then spade up the rich surface soil of the next breadth a yard across the strip, and throw it forward and down upon the bottom of the pit that was first opened, and also throw upon the top of this rich soil the clay that you dig up in making the second breadth two feet deep. Proceed in this way until you have gone through to the other end of the strip. At that end you will have an open pit with no soil there to fill it. The earth that was piled up at the end where you began must now be wheeled in a barrow to fill up this pit.

The whole is now trenched and level. The manure and rich soil are at the bottom and all the poorer soil is at the top. This top soil must now be enriched by digging into it a heavy coat of well rotted manure. Now the whole is finished, and when the frost has pulverised the soil it will be in a fine condition for planting in the spring.

The vines may be planted in a row along the center of the strip, and when they have grown two seasons, a trellis will be needed to train them on. To those who think this method involves too much expense and labor we would say, that good crops of grapes and of all the other small fruits may be raised on ground nearly so deep and rich as that of a good garden. But we wished to give directions for planting only a few vines in the best manner, in order to secure the best and most durable results.

In such a deep, wide and rich bed, the roots can range and revel in the midst of abundant nourishment, and the plants will display a wealthy luxuriance of foliage and high flavored fruit which will abundantly repay the labor.

For planting vines on a larger scale, the ground is deeply trenched with the plow by running several times in the same furrow, until the depth of about two feet is attained.

Guernsey Times. J. E. A.

Pryor's Red Apple.—While commenting upon some specimens of apples exhibited at the last meeting of the Horticultural Society, Dr. Warder spoke of the great difference in the apple called Pryor's Red, as raised in Kentucky, Southern Indiana and Illinois, and the same apple raised in Rochester, N. Y. They differ even here. For

in Kentucky he had seen the Pryor's Red like a Red Russet. In Rochester it was striped, of a lively color. This difference, however, was produced by soil and climate, not cultivation.

Mr. Heaver agreed with Dr. Warder, and spoke of the necessity of a work upon the fruit of this region, hoping that "Dr. Warder would hasten the completion of his book upon the subject." Mr. Heaver further remarked that apples grown in the North were much better in appearance—but in rich, sacharine quality, our apples were much superior.

Mr. Stoms spoke to the same effect, and produced a specimen of Pryor's Red, which, though of a rather dingy color, was rich in flavor. Mr. Stoms at the same time advised that persons purchasing apples in market should ask for Pryor's Red. It was of a much better quality than most apples sold, and superior to many which were more showy.—*Cin. Commercial.*

Fruit Raising in Miami Valley.

BY A. H. DUNLEVY, LEBANON, WARREN CO. O.

Though my recollection of events and business operations in the Miami Valley extends back to the beginning of this century, yet I must confess that horticulture and fruit culture, in accordance with the spirit of the times, attracted little of my attention until a more settled condition of society began to develop their importance. I have, however, some knowledge of early fruit culture.

In the neighborhood of Lebanon, where I have lived since December, 1797, the first apple trees were brought from Kentucky. The farm on which I now live, and the one adjoining, were thus supplied with apple trees from Kentucky nurseries as early as 1802 or '3. One of the trees still stands in in my dooryard. now nearly sixty years old, and has borne fruit until last year. These trees, when set out, were very small, apparently but one year's growth, and, on growing up, bore a great variety of apples, but, evidently, all seedlings. A few, however, bore very fine fruit—one, the best sweet apple I have ever met with.

Richard Kirby, a friend Quaker from New Jersey, had the first good peach orchard in this neighborhood. Where he got his plants I do not know, probably seedlings of his own planting. His orchard yielded abundantly—the finest peaches I have ever seen—as early as 1803, and about that time smaller orchards in the neighborhood began to bear, so that by 1806, and for several years—say to 1817—we had peaches, when not killled by the frost, so abundant that they often sold for 12½ cents in town, were given away in the orchards, and large quantities were distilled into peach brandy.

From the first bearing of fruit in the Miami Valley until about 1817, I never noticed or heard of the curculio, which has so injured our stone fruit since, nor did I notice that the grub worm destroyed our peach trees, as since. Orchards of peach trees planted as early as 1804 and '5, lasted and bore fruit in many instances until 1820, and, in some cases, until 1825.

Trees lasted best in a clay, upland soil, but grew largest, and decayed soonest, on our rich bottom, or second bottom soils. The first peaches raised on our virgin, untrodden soil—though seedlings—very frequently surpassed our present finest specimens of grafted fruit. It was then a common practice for children to select parcels of peaches from thair orchards which would fill a tin cup.

The fruit, of all kinds, in the early settlement of Miami Valley and country, was very perfect of the kind, and even the wild plums of that period were very fine, and some varieties occasionally were found as large as a hen's egg. But from about 1817, as my recollection is, the wild and tame plum were gradually destroyed by the curculio.

The apple of this early period, mostly seedlings, were also more perfect than of late years, but did not by any means equal the perfection of the peaches of that time, either in size or flavor. They were, in size and flavor, much inferior to our present improved grafted fruit.

In this county, the first regular and large nursery was planted by Benj. Wharton a few miles west of Waynesville. I did not know the time of his commencement, but believe he began preparations for his nursery about 1813. From that time until 1830, or near that time, Mr. Wharton supplied that neighborhood with choice fruit trees, for planting, and also supplied from his orchard the first fine varieties of apples produced here, except on occasional trees, which farmers had grafted with favorite kinds.

The Shaker Society of Union village also pretty early turned attention to orchards, and from 1815 to 1835 cultivated fruit tree nurseries to some extent, and furnished the neighborhood with many good fruit trees—apple, cherry and pear particularly.

My first recollections of large orchards of good fruit in the Miami Valley, carries me back to 1803 or '4. At that time, or about that time, James Lyon, Esq.,—father of Rev. James Lyon, near Walnut Hills—had quite a large orchard of apple trees, which yielded great quantities of good fruit, Mr. Lyon then lived on the road now this side of the Walnut pike from Cincinnati, nearly northeast of Walnut Hills, and perhaps about a mile from the college.

John R. Mills also, who died in 1804, had planted out before his death a considerable orchard, about a mile south of Reading, and where a large brick mansion was built a few years since.

The late Judge Henry Weaver of Butler county, was one of the earliest and most successful cultivators of fruit in the Miami Valley. Judge Weaver was raised, I think, on Long Island; came to the northwest Territory about 1790; lived in Cincinnati some years; built a stone house on Pearl street, a little west of Main, in 1795, as I learned from the inscription of his name and date of building on a flat stone near the top of the east gable end of the house, which stood there until within a few years, if not still standing. Mr. Weaver was many years Associate Judge in Butler county—was fond of agriculture, and took special pleasure in raising fine fruit, when there was little in the country. He lived near Trenton, in Butler county, but has been dead many years. At this early period it was not uncommon for farmers to raise small nurseries of apple and peach trees for their own use, and sometimes to supply neighbors. They were generally, however, but seedlings, and most of the fruit from them of the apple kind but poor. I have a faint recollection—it may be an error—that John Ludlow or Wm. Ludlow, one or both, had nurseries at an early period, in Hamilton county, near Cumminsville. I had no personal knowledge of such business, but it strikes me that I have often heard of these persons about Cumminsville.

John Hormel settled some three miles north of Lebanon, about 1800. He came here from near Brownsville, Pa., and brought with him, either in cuttings or trees, quite a large supply of an apple which, from that time, was extensively cultivated in this country. It was then called the Hormel Apple, from its source here. It is known to our orchardists and fruit culturists as the Milam Apple. It was a good apple, fine bearer, and kept well during the winter. They are still found, or were until lately, in the Cincinnati market.

Of early fruit raisers, I remember a Mr. Turpin, of Turpin's Bottom, above Columbia, who vended in the Miami Valley, as far north as Lebanon at least, large quantities of apples; this, too, as early as 1802–3; and one Edmund Buxton, between Montgomery and Reading, had a very large and productive orchard of apples soon after.

Before closing this sketch, I wish to remark that, unless I am greatly mistaken, the frosts of our winter for the first forty years of this century were by no means as destructive on trees as since that time or near that time. I never knew peach trees to be seriously injured by frosts until 1840, much less cherry, apple and pear trees; since that time the destruction of peach trees from frost has been frequent. In the winter of 1845-6, this destruction was great and extensive, destroying peach, cherry and even apple trees as far west as the Mississippi river—how far east I do not know. In the winter of 1851-2, many trees were also destroyed, as also in 1855-6. In my own orchard I have lost all my Heart cherries, and even the early May, a very hardy cherry, and the old Morello cherry, which I never knew affected by frost until this late period; since then they have been extensively destroyed by the frosts of various winters from 1846 to 1856. Many of my delicate apples also have shared the same fate, the Summer Queen, Bough, Maiden's Blush, Belmont, &c., have nearly all been destroyed; the Baldwin and others much injured. I have found the Wine Sap, the Smoke House and the Rambo my hardiest trees and surest bearers.

Corn in Seneca Co.—Mr. George W. Lutz and Son, of Pleasant Township, in this county, raised this year on one hundred and twenty-six acres, eight thousand six hundred and fifty-five bushels of corn, averaging over sixty-eight bushels to the acre. Mr. Lutz for several years has been farming on an extensive scale, and therefore knows how to make the "Sacred Soil" do its best. This is one-twelfth of what was raised in that township last year.—Beat it! who can?—*Tiffin Advertiser.*

It is said that the average number of battles a soldier goes through is about five.—We know an old maid, says a down-east editor, who has withstood fourteen engagements, and has powder enough left for as many more.

Editor's Table.

S. D. HARRIS, . . . EDITOR.

THE OHIO STATE FAIR is to be held in Cleveland next September, on the grounds lately occupied by the military and known as Camp Brown. This is eastward upon Euclid street, say about a mile and a half east of the Weddell House, on the south side of Euclid St., and on the line of a city horse railway. It is also about half a mile west of where the Cleveland and Pittsburg railroad crosses the east end of Euclid St., to which crossing the city railway extends. It is a delightful walk all the way from the heart of the city to the fair grounds, being along that most beautiful of all avenues, the pride of the Forest City; and for those who do not like to walk, the passenger railway will afford a cheap and easy transit, while visitors arriving on the Cleveland and Pittsburg Railroad can be landed within half a mile of the gates.

What Shall Farmers Raise?

The disturbances of these times have pervaded all sorts of business, stimulating some, prostrating others, and turning business into new channels, all over the country. It is one of the capabilities of our Yankee nation to be adequate to any emergency, and all they ask is that public affairs shall put themselves in position, or take some definite shape, and whatever that may be our people will immediately adapt themselves to it, and build up a thrifty business around it.

It would seem from its general stability that agriculture has least need of looking after new modes or materials of production. Ever since the world began, the business of the farmer has been the most simple, stable and uniform of all the industrial pursuits. Hitherto in this country, we have for the most part been content to let each section produce its own peculiar crop, and by means of exchange, each has supplied its own lack out of the fullness of the other.—But now comes a time when one half of the country is shut up against the other half, and the inconvenience of this unfriendliness makes itself felt right in the sensitive spots of back and stomach. Whatever self denials Chivalry may be willing to bear, Yankeedom is not so tame as to lie still while back and belly are in trouble.

Rather than submit to any such inconvenience, our whole system of agricultural practice must be revolutionized, and whereas we have hitherto planted corn and made it into bacon, to trade down the river for sugar and cotton, we will take a short cut and make the sugar and cotton at home.

But for one thing, this would be a piece of admirable economy, and as the case now stands, of patriotism also; but that one thing is not a little thing: the way to the successful accomplishment of the above piece of rural economy is like what they say of Jordan, a hard road to travel, without even the assurance that the promised land beyond will be such a paradise as sanguine people are wont to picture it on paper.

All of this by the way.

We hope the Cultivator readers have not overlooked the excellent letter from Gen. Worthington, published in the February No,, on the practice and results of Acclimation. This subject is a very fine study for scientific farmers, and we have more to say upon it sometime. There is a natural range or *habitat* for certain plants and animals, in which they arrive at their greatest perfection; taken out of this range they either become acclimated to their new home by an adaptation and consequent deterioration, or they simply continue to *exist* there, like some old fashioned people we have seen introduced to widely different states of society from that in which they had their origin and education,—worse or better no matter which—where they always appeared like a cat in a strange garret, without either the naturalness of their former life or the power to assume the habits of their new associations.

Experience abundantly proves that certain acclimations are possible and even feasible, whether profitable or not; but many of these are like the horse which the man taught to live without eating, which when he had fairly learned what was desired of him, "up and died."

Small and judicious experiments in any matter of cultivation, are instructive and profitable in the experience and information that invariably attends a healthful investigation; in this sense alone they always pay, and often in a further sense of pecuniary profit. It is perfectly feasible to grow tea plants in our conservatories, or even in parlor windows; an oaklet may be grown in the mouth of a glass bottle filled

with water; a tuft of oats from a pine cone; orange plants from a tumbler of mold on the mantel; wheat from a flock of cotton upon a basin of water; and even peaches ripened in a flower-pot — all bringing their reward with them.

So cotton may be raised in almost any warm, early nook in Ohio, and morus multicaulis, from which handsome cocoons may be reeled by amateur silk growers; and if these articles could not be obtained elsewhere to better advantage, our people might very properly persist in their cultivation. But we are not shut up to any such hard necessity. Even now the road through the heart of Tennessee up into Alabama is very nearly as well opened as the way to Detroit or Cleveland, and any calculation based upon the supposition that the products of the South are to be much longer inaccessible to our markets, is a fallacy.

Then comes back the great question: What Shall Our Farmers Raise? We reply: just what they have always been raising—just what our soil and climate are best fitted for, and just what our market demands. A little more of this, or a little less of that, as the stress of the times may indicate; let the horses neigh at the homestead, the cattle low upon the plains, the sheep frisk on the hills, the swine grunt in their pastures, the corn rear its myriad plumes in the valleys, the wheat billow and grow golden in sunlight, and the grass spread its emerald bosses in the meadows, for the people will need them all, and these are What Farmers Should Raise.

A Secesh Horse for Ohio.

SUMMERSVILLE, Nicholas Co., Va., Jan. 18, 1862.

DEAR SIR:—A few weeks ago I led an expedition from this place to Meadow Bluff and the vicinity of Lewisburg, Green Briar Co. Va. Among our captures from notorious and active secessionists, was a stallion of great beauty and merit. He was at the country seat of Wm. H. McFarland, Esq., of Richmond. I learned from the overseer, that last year (probably a year last fall) the horse took a premium of $250 at Richmond, at the Fair,—the State Fair, I suppose.

Now if there is in your office a copy of tne Report of that Fair, I shall deem it a great favor if you will find what is said of this horse, and send me a copy. As the horse will doubtless go to Ohio, where I doubt not he will be deemed a valuable acquisition to our stock—you may perhaps feel a little State interest in the matter.

I was told that he was sired by Old Revenue, a horse of much fame in Virginia and Kentucky. Revenue is now in Kentucky. The mother was a thorough bred mare. We captured her with the horse, and she has evidently great merit. The name of the horse is NORWAY. The overseer said that Mr. McFarland had refused $1000 for him. The horse is a very dark bay in color,—not large, very perfect in form, and with the finest limbs I have ever seen.

E. B. ANDREWS,
Major 36th Regt. O. V. M.

REMARKS.—Major Andrews is a gentleman of fine education and scientific attainments, who entered the service in the 36th Infantry, from Marietta. We have looked over the premium list of the Virginia State Fair held in 1860—(none being held in 1861) but do not find mention of this horse; perhaps Maj. Andrews has not got his true field name. Can any of our horse men identify this animal and his dam, both of which will probably soon be in Ohio? We think the "overseer" set up the premium too high anyhow, as the highest horse premium at the Virginia State Fair in 1860, was $100.—ED.

A Premium Corn Crop.

Mr. Oliver Curtiss of Genoa tp. made his return to the Agricultural Society on a field of corn entered for premium last fall. Thinking the yield a good one for the season, which was very dry with us, I send you the items. The amonnt off three acres, measured as required is 273 bushels 12 lbs., or 91 bushels and over per acre. The expense per acre at a liberal figure is $10,25. The number of hills on three acres, three feet and one half each way in rows, was 9,159 or 3,053 per acre.

The ground was our Big Walnut bottoms, had been in grass, (pasture or meadow) about twenty years, was broken up (with a double plow from Gill and Son's of your city) about ten inches deep, planted with hoe, and and plowed three times through, twice in a row at each time, with double shovel plow and twice hoed immediately after plowing. The corn of the yellow kind from selected seed of Mr C—s' own raising.

Galena Deleware Co. 1862. H.

The Farm.

About Rail Fence.

THE LENGTH OF RAILS AND STAKES.

The most common length for rails is twelve feet, although many farmers make them ten, eleven, and even fourteen feet in length; but when we consult convenience and economy in splitting and handling, as a general rule twelve feet for rails is the best length. If timber should split very freely, there is no objection to cutting them fourteen feet long; on the contrary, if timber should not split well it might be a matter of good economy to cut them ten or eleven feet long; but there ought to be a uniform length for rails on every farm, because when rails are of different lengths there will be more or less disadvantage in making them into a fence. Large logs should be sawed in two, just twelve feet long, and smaller logs may be cut with an axe; and as every rail cut should be measured with a pole just twelve feet long, each cut should be measured from the middle of the chip, or axe-cut, and the top end of each cut should be left square; this will make the heart rails a little longer than the outside rails. But in laying the foundation for a fence, if there should be a little variation in the length of the rails, it should be remembered to select first the sap rails, and if the heart rails project a little more than is necessary at the joints, it will do no harm.

The length of stakes should always be regulated by the height of the fence. They are usually cut from seven to nine feet in length; but whatever length may be adopted, it should be kept in mind that stakes should be cut long enough to admit of being set the second time, after the end which has been set in the ground has rotted off. The part of stakes out of the ground will usually last twice as long as the part in the ground, no matter what the timber may be. Therefore, if stakes be cut just long enough to be set but once, after one end is decayed, so that they need re-setting, they are worthless; but by cutting them long enough to be set again after a foot or so has rotted, it is much more economical than to make new stakes as often as the ends rot or decay enough to render them too short for the fence.

Some farmers deem it a matter of economy to cut their fence posts, and particularly bar posts, long enough to admit of the other end being set in the ground after one end has decayed. But there are very plausible objections to this practice. Fence posts which extend from two to three feet above the fence present an unsightly appearance, and besides, the longer the post is the more liable it is to deviate from standing erect. Bar posts which extend three feet higher than they ought to are a nuisance, because they are always in the way, especially when one is passing with a load of hay or grain.

PEELING RAILS AND STAKES.

This should always be done when they are split out, so that they may season the better. It requires but a little time to peel them when splitting them, and as rails and stakes are often split by the job, at so much per hundred, a man will usually split them, peel them, and stick them up for a few cents more per hundred than he will ask for simply splitting them, providing one insists on it when negotiating about splitting. When timber is cut in the fall, it is true, it does not peel as well as when cut in the summer, but as a general rule it will peel tolerably well after it is split out, even when cut in autumn. When the bark is thick and heavy, it will peel about as well from small pieces, like rails and stakes, as it will when the timber is cut in the summer.—But the bark should be taken off at some rate; and when it adheres so tightly that it is necessary to cut it off, it may be cut off at each end about a foot or so and laid in the fence, with the bark *downwards*, and during the summer it will usually become so loose as to drop off itself; but if it is not held in the joints of the fence, it may be stripped off very readily after one end is loosened a little, and if the rail be laid with the bark down it will become loose by the drying of the rail. When rails are made of timber having a very thin bark, like ironwood, for example, the most expeditious way of peeling them is to lay the rail to be peeled on a couple of benches, and then with a drawing-knife shave off the bark while the workman is sitting on it.

When small poles are used for rails, if they are not peeled entirely a strip of bark should be taken off on two sides opposite to each other, and one of the peeled sides laid upward in the fence; by this means the bark will become loose during the season, and many times drop off itself. Rails, stakes, posts, and timber of every other description, will be very much more durable if peeled, unless it is buried in the ground.

When a stick is two feet or more under ground, it will last much longer if the bark be left on; but if the bark be left on a fence post, the part of it two feet below the surface will be more durable with the bark on than if it were off. But the same post wilt rot off at the surface of the ground many years sooner if the bark was left on than if it was peeled before it was set. Bark preserves timber when it is alive, but after it has been cut down it hastens its decay, when exposed to the influences of the weather, wet and dry. When the bark is not taken off, worms damage rails and posts of many kinds of timber. Allowing rails to soak in a pond of water for a few days will generally loosen the bark so that it may be peeled off very quickly.

DISTRIBUTING RAILS FOR FENCE.

It is a very common thing for many farmers, in hauling rails and stakes where a fence is to be made, to distribute them, as to number, entirely at random, without any calculation at all how many will be needed for a fence of a given number of rails high, and therefore in some places twice as many rails are unloaded as are necessary, while in other places there are not half enough.

Sometimes there may be just enough to build the fence, but they have been distributed so unevenly that many of them must be carried too far. When a man is obliged to go twenty or thirty feet for every rail, it will take him twice as long to lay up a fence as it would were the rails left within a few feet of the place where they will be needed. It is a very easy matter to distribute rails for a fence so that there will be just enough to build it, and it argues a little stupidity and want of calculation to see one distribute rails in such a manner that after the fence is finished there are several loads to haul away. That is all lost labor; and it will consume several hours to haul and unload, and reload and haul away, two or three loads of rails.

In distributing rails for a fence, in the first place set a few stakes where the fence is to be built. Now calculate how many panels there will be in five or six rods.—We will say there are thirty paces in six rods. If the foundation is not laid, the rails may be laid for thirty paces or so, in a straight line, or zigzag, like a worm fence, and then, by counting the number of panels in thirty paces, and by multiplying the number of panels by the number of rails in one panel, we shall know how many rails are wanted in a distanee of thirty paces. Now, let the number of rails required in thirty paces be distributed close to the place where the fence is to be made, and put them in small piles, with not more than ten in a pile, so that they will be near at hand, and be well spread out, so that small rails can be selected, if necessary, without tumbling over half a load. Never leave them with nearly a load in a pile, nor in the place where the fence is to be built, lest they have to be removed; nor a rod or two distant, for fear they may be in the way. Now pace off thirty paces more—it can be done in less than one minute—and drop as many more rails, and in the same order, and proceed in this manner until a job is finished. When the foundation, or the first rail is laid, it is a very easy matter to make calculations for hauling just enough to make a fence.

Rails of one kind of timber should always be left together, and rails of another kind of timber, unless they are equally durable, should be kept by themselves, because, when oak and basswood are laid together, the basswood will decay long before the oak, and the result will be, the entire fence must be repaired; whereas, if the oak had been kept together, and the basswood together, no part would need repairing but the basswood. For the same reason, new rails should always be kept together, when repairing fence; and take old ones to supply the place of those which have decayed. When one is hauling rails which are to be laid in a fence immediaiely, it is much quicker to take the rails from the wagon and lay them in the fence, than to throw them on the ground and then pick them up again and lay them in the fence.

FENCE BLOCKS.

These are a very important item in building fence. It is very poor policy to place rails on the ground or on perishable materials which will soon let the fence down to the ground. Bowlders, from ten to twenty-five inches in diameter, make the best blocks. When one is a little too large, let a hole be dug a foot or so deep, and roll it in. When one is a little too small, put it on the top of a flat stone. A small pile of small bowlders or little stones of any kind, will make a very good block for a corner to rest upon. When wood is used for blocks, always place the bark side down, if possible, because they will last many years longer than if the bark side is up. When a round stick is used for a block, let it be peeled, if practicable; but if not, cut off a strip of bark, three or

four inches wide, on one side, and lay that side up, and then, as it seasons, the bark will usually become loose, but if the bark be left on the *top* of blocks it will always hasten their decay. Sometimes a couple of good pieces of broken rails will make a very good fence block. Flat stones, a foot square, or more, laid on the top of a little mound of earth, or on the top of two or three sods, will make capital fence blocks. When one has a plenty of small stone, it is good policy to make a ridge of stone, a foot or so high, and lay the fence on the top of it.—This will answer both for a straight fence and for a zigzag fence. Where no stone can be found, and wooden blocks are scarce, make a fence block with square sods, and lay on a piece of board, or slab, or two or three short pieces of old rails. *Let the fence be kept well up from the ground, at all events.* When a foundation corner is made of earth, or sods, the sides should be covered with sods, to prevent them from washing away in heavy showers.—*Todd's Young Farmer's Manual.*

Application of Lime.

In expressing my opinion and some of my reasons for it, I do not wish to commit myself to engage in any further controversy upon the subject, as it is now my desire to learn, rather to teach, and I am about instituting a series of experiments upon the application of lime, which would be much more valuable if repeated by a few others who are interested in the subject, provided all controversial spirit was avoided, and the same system was observed in each case, in order to compare results and obtain the truth, rather than the support of any theory.

The article referred to is based on the assumption that "many soils have lime enough already." Now, I have been teaching the opposite of this doctrine for many years, viz: that the "chalk soils" of England are greatly benefited by the application of lime, and that fields abounding in shells are limed advantageously; moreover, it is almost proverbial, that lime is applied with the greatest advantage to farms, and even the very fields where limestone rock crops out. We are indebted to soil analysis for the fact, that some of the most productive soils in Ohio only contain about one-tenth of one per cent. of lime, or thirty bushels per acre, whereas some of the most unproductive chalk soils of England contain thirty or forty times as much—yet the latter are improved by liming. It is very remarkable that the inference generally drawn from such statements is, that soil analysis is either not reliable, or it is practically worthless, however accurate—as most persons assume that its object is to ascertain the per cent. of lime; &c., in a soil, whereas the most valuable soil analysis has reference exclusively to the proportion of these available elements annually eliminated from the soil, or from some other soil or formation (however distant) that naturally supplies it, beneath the surface, through springs. A millionaire may be a poor man, and actually starve, if his property is unproductive, and consequently, in Europe, it is customary to estimate the wealth of and individual by his income. The application of caustic water-slacked lime to a poor soil with an unproductive capital, enriches the farmer just as the Life Insurance Company sometimes provides an annuity for the poor capitalist, who cannot otherwise make his property available.

In teaching agricultural chemistry, I have been in the habit of discussing this subject under the following propositions, which may be quite sufficient for those who will take the trouble to think for themselves; and others would not use them, although each were illustrated and expanded into a lecture or chapter:

1st. Lime acts directly, as plant food—a certain portion being necessary to the formation of many plants.

2d. Lime acts directly, as plant food—being substituted for potash, &c., when these elements are deficient in the soil.

3rd. Lime acts indirectly in supplying plants with food, viz: rendering sand soluble, and thus producing soluble silicia—especially when sand is exposed to the action of caustic lime, as in the lime compost, and when lime is properly applied to the soil, and at the right time.

4th. Lime decomposes or hastens the disintegration of particles of rocks that contain potash in its natural or dormant and insoluble form (most soils being composed of such particles, containing also ammonia, that is otherwise quite as insoluble as the soda that composes so large a part in common window and other glass.) This is also an indirect action of lime in supplying plant food.

5th. Lime, while in its caustic state (water slacked) acts indirectly by compelling water to give up its hydrogen to other substances (as for instance— the familiar experiment of boiling water that protects a piece of phosphorus until some slacked

lime is added.) Water may thus be converted into plant food, in an infinite variety of forms by the action of caustic lime on the elements of an unproductive soil—more than ninety per cent. of nearly all vegetable substances being composed of the elements of water exclusively.

Infinitely more credulity is manifested by those who imagine that accident has distributed so universally the food of plants over the whole surface of our globe, with all other substances that are useful to man, while arsenic, antimony, mercury, and other poisons are rarely found. The "elements" of every drop of water that falls on the surface of this globe, whether in the frigid, temperate or torrid zone, are invariably nitrogen and carbon, as well as hydrogen and oxygen. I wish to express the idea that all of the first two that the plant uses as food must first become the elements of water. The illustration that I refer to with regard to the influence of lime in causing phosphorus to rob water of its hydrogen, should enable the merest tyro in chemistry to understand how caustic lime in the soil may determine the formation of ammonia, (N. H.,) or in other words cause the nitrogen (that always exists in water) to decompose water, just as its congener, phosphorus, does when exposed to water in the presence of slacked lime. Chalk, powdered shells, or other varieties of lime will not answer the purpose.

Hitherto nitrogen has been considered one of the most inefficient elements; now millions of dollars are willingly paid annually by farmers, in order to get it from Peru, (as guano,) and it really seems to be the active element in nearly all of the processes of oxidation, water and even oxygen itself being almost, if not quite, inert as oxidising agents, except in its presence; and (e. g,) lime (while it exists in the earth as quick-lime) is the fulcrum upon which this powerful lever rests, and without which the farmers must send to the Pacific for material (nitrogen) to make wheat, and the manufacturer is dependent on the shores of the same ocean for saltpetre. Would it not be better for both, if the former were to resort to the "lime compost," and the latter to the "nitre-beds," while refuse materials are abundant, and time can be substituted for temperature in the use of caustic slacked lime?

6th. Lime acts, indirectly, as a manure, by decomposing poisons that prevent the plants—such as sulphate of iron, that frequently exists in springs (and is supplied by capillary attraction to the surface soil, as described by Johnston in his little work published in 1845.)

7th. Lime changes the consistence or texture of the soil when applied as caustic water-slacked lime.

DAVID STEWART, M. D.
Chemist of Maryland State Agricultural Soc'y, Annapolis.

Cotton Cultivation.

At a late meeting of the Cincinnati Horticultural Society, Mr. Buchannan read a letter from Mr. Ithamer Johnson, Union Village, Feb. 4, 1862, in reply to the inquiries of the Committee upon the subject of cotton culture. Mr. Buchanan pronounced it the best paper he had seen upon the subject, and that the Committee would incorporate the letter in the report which they expected to make in two or three weeks.

Mr. Johnson remarked in his letter there was no more mystery in raising cotton than corn; it was sometimes raised in the same row. It delights in black, dry, sandy soil, and must be planted on the surface. Southern slopes are the best. Our seasons being too short for cotton, the more it is exposed to the sun the better.

The seeds should not be planted in furrows, or drills, but in elevated ridges, or earth thrown up.

WILD PLUMS AND SERVICE BERRIES.

A letter from A. H. Dunlevy, Lebanon, upon the early history of Horticulture in the Miami Valley, was received, read and ordered to be entered upon the minutes.

Mr. Dunlevy having stated in his letter that wild plums could be cultivated and preserved free from the ravages of the curculio, Major Millikin inquired whether there were any about here at this time.

Mr. Heaver said he had several (the different varieties,) upon which the curculio operated as severely as upon the tame trees. Mr. Millikin remarked to same effect.

Mr. Millikin approved of Mr. Dunlevy's favorable mention of the persimmon tree, and the service tree. Of the latter he had none, though he had the service bush.

Mr. Mullett said he had the wild plum; it was something like the wild cherry, and the tree made a beautiful appearance, if the the fruit was not good; they deserved cultivation for their beauty.

Mr. Heaver remarked that there were very few service trees in this vicinity; they grew about Pittsburgh.

Mr. Challen said they were abundant in Somerset County. Pa. If it were desired, he would give the name of a gentleman who has a nursery with many fine young trees of species.

Cattle Department.

Talk about Cattle.

At a recent discussion of the Mass. Legislative Agricultural Club, Sanford Howard remarked that the general importance of cattle-husbandry was so obvious that it was unnecessary to dwell particularly on it. All varieties of domestic cattle belong to one species. It is not a native of America, though two species of the ox tribe, the bison and musk ox, are indigenous here. Various experiments have been made in the domestication of the bison, the result of which is that they cannot be advantageously substituted for our domestic cattle. Our cattle have been mostly derived from the British Islands. In regard to the adaptation of breeds to different localities, it is obvious that one breed cannot answer everywhere. The various breeds which have been and probably always will be kept distinct in Great Britain, illustrate this principle.

In this country there are but few breeds with which we have had sufficient experience to justify a positive conclusion in regard to their relative merits, and until we have more demonstrative evidence, we must be governed, more or less, in selections for special purposes by the facts which longer experience in other countries has established. In this view it will be useful to consider the characteristics of foreign breeds.

A brief description was here introduced of the more prominent British breeds. The Devons are adapted to soils of medium or inferior quality, on which they are chiefly bred in England for beef. They were formerly much used for labor in England, and in our country this is still one of their prominent uses. They are seldom adopted where milk is the leading object. The Hereford, with the exception of variation in color, is similar in character to the Devon, but of much larger size; not as well suited to poor pastures, but fattening easily and to great weights; well fitted for labor, combining nearly the activity of the Devon with weight and strength enough for any work required of oxen. It is seldom kept specially for dairy purposes, though probably equal for milk to any breed that has an equal tendency to fatten. The Long-horned, one of the oldest British breeds, has always been noted for dairy properties. Under Bakewell's management, it was at one time the most popular breed in England. It is slow in arriving at maturity, but hardy and remarkable for longevity.

Of Scotch breeds, the Galloways and West Highlanders are noted for beef. The latter are the most hardy of all British breeds, living through the year on their native mountain s without shelter. It has not been introduced into this country, but is worthy of a trial. The Galloway has been introduced into Canada, where it has done well. The modern Short-horn is bred in England chiefly for beef, for which purpose, under a mild climate and abundant food, it is very profitable, although the quality of its flesh is inferior to that of the breeds before noticed. The success of the breed in this country has been greatest in the Western States, where, as in England, it is reared for beef. The Ayrshire is the only breed kept specially for the dairy in Scotland. It has of late years been sent into England to some extent, and has also been taken to several countries of continental Europe. It has also been introduced into this country, and if it should continue to do as well here as it thus far has done, will become permanently established. The Kerry breed of Ireland is small, hardy, and in its native district very useful for dairy purposes. The only specimens known to have been brought to this country belong to A. W. Austin, Esq., of West Roxbury. They have only been milked one season, but have thus far more than supported the claims which have been made for them. The Jersey breed is remarkable for richness of milk, and when carefully fed and sheltered is very useful.

Mr. Stedman of Chicopee, referring to a remark of Mr. Howard, said the question with farmers should be, how they can most advantageously improve their stock. He deemed it the best course to improve what is called native stock, which is really of no breed, to some of the improved breeds. Let the farmer make up his mind which of the improved breeds is best adapted to his purpose, and then use wholly bulls of that breed. He regarded the value of the improvement which might be made by a single cross of this kind, as equivalent to five dollars a head, which for the whole stock of the State would amount to over a million

of dollars. He would use none but full-blood bulls, if such could be obtained, and thought agricultural societies should discourage the use of grades by refusing to give premiums for them.

Mr. Sheldon of Wilmington, had always been an advocate for what are called native cattle. He is endeavoring to form a herd from a stock which can be traced sixty years. He considers them the best milkers he has ever known. It is difficult to dry the cows even on meadow or bog hay. Of imported breeds, so far as his observation goes, he prefers the Ayrshire for milk. For light work prefers the Devons, which are hardy and more easily kept on such fare as he can give than larger cattle. For work on the farm and to make beef, he would choose a cross of the Short-horn with what is called native. He thought agricultural societies should offer premiums for herds of cows, instead of for single specimens. He gave what he deemed to be the proper points of oxen and cows, which are the same that he has given at former meetings, and have been published.

Mr. Davis of Plymouth, concurred in the views which have been advanced in regard to grade bulls; yet he found that one of the first objections which is made to offering premiums only on full-bloods, is that it is done to encourage "fancy farmers."

Mr. Wetherell of Boston, declared himself strongly opposed to offering premiums on grade cows, and would even prohibit agricultural societies by law from doing it. He agreed with the proposition that the so-called native cattle should be crossed with bulls of improved breeds, for which purpose he preferred the Short-horn. He had never known any breed crossed with the Short-horn that was not improved by it, and in England it is a maxim that the Short-horn will improve any breed.

Philosophy of Ground Feed.

By Dr. Geo. Sprague, late Sec. O. B. S. Agriculture.

Although there is no doubt of the economy of feeding ground feed to farm stock, as a general thing, still the mode of feeding, and the uses to which the animals so fed are put, has much to do with the propriety of using ground feed. The salivary glands secrete a fluid, the office of which is to aid in digesting food taken into the stomach. The quantity of this saliva required by the stomach, is in proportion to the amount of food taken into it. This saliva is given out by the salivary glands but slowly, and generally only in the act of mastication, the glands, in this act, being stimulated by the presence of food in the mouth, as well as by the pressure of the contracting muscles. A gallon of oats ground and made wet with water, will be swallowed by a horse in, say, three minutes—a gallon unground, in nine. Now, with the gal- of whole oats, there will pass into the stomach more than three times as much saliva as with the ground oats, because, in the act of mastication, the whole grain acts as above stated. It will be different with cat le, as they masticate a second time.—Their digestive apparatus is also more capacious than that of the horse; and their digestion is more perfect. Therefore, in feeding ground feed, to horses especially, it should be fed *dry;* or otherwise, combined with whole grain, or cut hay or straw, that the horse may be forced to occupy a sufficient time in eating. Let any one who doubts this position, put a horse upon wet ground feed, and in a week's time he will witness the evidence of imperfect digestion, by the presence of acidity, indicated by the belching of wind from the stomach, itching of the fundament, rubbing the root of the tail therefrom, lampas, rough, staring coat, dullness, and inability to stand hard driving, and at the end of a month, worms will make their appearance. Now, as a proof of the cause being as above state, at the end of the first or second week, give salt and ashes to neutralize the acid generated by the fermentation, change back to whole oats, and in a very few days, the digestion will again be perfect. A horse may be rendered a confirmed dyspeptic, by being allowed to swallow rapidly, wetted ground feed.

Horses that are allowed access to the earth, will, when eating food that ferments in the stomach, eat earth, instinct teaching them that this will neutralize the excess of acid. Horses fed on corn are liable to excessive acidity, and if close confined, should always have *salt and ashes, or salt and clay earth within reach.* The same rule will also apply to hogs; they suffer from acidity if kept from the earth, especially when fed on wet ground feed, and will not thrive in this condition. For the reasons before stated, swine will maintain a better degree of health if fed on whole grain, than if kept on wet ground feed, especially if confined, as work horses usually are, out of the reach of salt, ashes, or earth; these always being called into requisition by brutes, to correct the effects of improper feeding.

The Garden.

For the Ohio Cultivator.

A Currant Convention.

According to your request, Col. Harris, I now write out some of the notes I made at the Currant Convention that I attended last summer. Without expecting my notes would ever see the eye of the public, in any form, I of course did not make them as minute as possibly most of the speakers would like, were they knowing to the fact that what they then said, was going to the eye of your ten thousand readers.

Again, some of them, whom I presume spoke for themselves, I have no doubt will feel offended, as all public speakers do, that I have not given them an opportunity to revise their speeches, so that their especial friends would be pleased with them; but if any one find the coat these speakers used, have too much acid, or that it is too deep in color, they must not wear it, or if they do, why then do so, remembering that it is not always out of order to speak in a Pickwickian sense.

And now to my notes, where I find that my arrival at the Convention was not until after it was organized, and just as the President was commencing his address. Looking at him a moment, I found he was an old acquaintance, a perfect Dutchman—red in the face, quite plump, rather short and bunchy; and as he proceeded in his opening address, I could see that however elated he might feel at the position he was occupying for the day, there was at times an acidity, that left a stirring feel upon all of his admirers. When I got my pencil ready for notes, he was saying "that although old, and even sometimes called "Old Red Dutch," he felt as sharp and sprightly, when in the hands of those who knew how to treat a Currant, as he ever did; and while he was pleased to see so many good-looking brothers and sisters in the Convention, he hoped they would all remember that in the life of a currant as well as in the lives of noted men, steady production and that of worth corresponding to the favor shown them, would be necessary to keep them long in favor, however much their especial friends might laud their praises.

He said, he had been many years serving the public, and therefore they might well forgive him if he should say now a little that smacked of egotism. Thus, while he was willing his younger associates should come into the grounds where he was living, he had observed that where large and steady crops of a fruit just suited in acidity and sugar to the wants of the cuisine was required, he had always been sought for, and cultivated with a knowledge that he never forgot his friends. He said that he found himself often touching agreeably the palates of the sick in a sort of jelly like character, and he thought this Convention could claim for itself especial favor among the people, for its great use in ministering to the wants of those diseased, as well as pleasing the taste of the well, and adding to their enjoyment of roast duck, beef, etc.

He was an advocate for temperance, but while so much was now being said of the profits of grape growing for wine purposes, he trusted he should here be heard and understood by all, when he said that more money could be made by his branches, when applied to such purposes, than the same amount of time and labor if devoted to the grape. He knew this was talking strong, but he was only saying that which he knew. Let any one figure it out for five years in succession, and they would find he spoke by the book.

There was also another thing he desired his friends always to tell their lovers, that adding sugar and large quantities of water to their expressions, would never make good wine; it might make a pleasant cordial, and by such additions, more of the article would be had and possibly sell; but, said he, if they would make from our juices a liquor that when drank would leave on their tongues the sparkle and vivacity that belongs to all of my red and white friends here, when in ripe fruit, they must be chary of adding either sugar or water. If any one doubted him, he would say there was a Case at Cleveland who had used him as he

desired all should; there he had not been drugged with sugar until his breath was strong of alcohol, but whenever permitted to touch the palate, he reminded its owner of the currant direct from the bush.

Before closing and giving an opportunity for speakers in the Convention, he would like just to remark, and he believed all would agree with him, that the better care given to all the members of this meeting, the better would they repay the donor. He would now desire the Convention to proceed, and as he saw his long and well tried associate near him, would ask her to open the discussion.

The *White Dutch*, very pale, but withal full as plump as the President, modestly remarked she had long stood by the side of *Red Dutch*, and even now many considered she was with him perhaps as reliable, and at the same time as mild as any currant should be. She knew she had a strong rival in *White Grape Currant*, but that lady was too modest to take any credit not justly her due. There was one thing, however, that she claimed over the White Grape, and that was, she always stood up well, and invariably kept her skirts out of the ground, which——

The *White Grape Currant* here broke in: Mr. President, I have no wish to detract from my good old friend, White Dutch, but she has insinuated that I do not always keep my skirts clear of dirt; this is not strictly so, sir. True, I bend my branches, but it is because I load them so heavy. As to acidity, I think we are about alike, and as each of us have our friends, I hope we shall continue to live right along in a mutual enjoyment of the public's approval.

Victoria, all the way from England, now arose and with a little hesitancy remarked that she had now been many years before the public, and all those who had ever had her acquaintance, acknowledged that when cared for, as a scion of so princely a house as hers should be, she had, like her Queen, borne abundantly, and it was with gratified pride she could here state publicly, she had no cause to fear comparison with any of her friends. The Long Bunched Red, she presumed, would challenge her for length, while Cherry might possibly be disposed to boast of size; but when all the good qualities that make up a currant were desired, she should always be disposed to enter the lists. She would here say many had been deceived in connection with her name, for while they received the name, it was rare that she had truly been present. She also desired to call the attention of this Convention to the fact that some persons, either from ignorance or wilfulness, still kept one of her synonyms before the public, and sent her out as a new thing, under the name of *Raby Castle*.

A very large red fellow next drew the attention of us all, and on inquiry I found he was called *Cherry*. He said it did not perhaps well become him to speak against a lady, but if by so doing he should continue the imputation he had already gained of being sour, he must have his say. And he therefore challenged the whole Convention to produce his size or beat him in quantity, if he only had plenty to eat and could be left until he got his growth. True, he said, young sprouts of his did not show their true character under three or four years, and perhaps if any one wanted a crop right off, and had only common garden soil to feed with, they had better take the President or some other of his good friends.

As the Cherry sat down, there was a perfect rush of voices, so many desired to reply to him, but the President said he thought his friend the Cherry had in his last remark reduced his bravado considerably, and he thought the members had not better pay any further attention to his, the Cherry's, well known acid character.

"Dough-face"—"soaped the old President"—were the remarks I overheard around me; but as a very large and handsome lady, although quite old, got upon the floor under the name, as I was told, of *Belle Versaillaise* or *La Versaillaise*, all eyes were turned to her.

She said she had not been in this country many years, and her merits she supposed were known to but few here; yet as these

Conventions were not every-day affairs, she felt called upon now to speak. The Cherry gentleman had boasted largely of his size, and with good reason, but she found those who knew her well, were disposed often to offer her in comparison. She said this was perhaps a little immodest in a lady, but she was not the only large one in the land, and as she always confined herself to her true nature, she expected to be excused.

The President here said the lady was perfectly correct, and certainly excusable, for she and Victoria approached nearest to what the public were now calling for, and therefore deserved especial commendation.

A very curious character now rose, and with a mild way, said he desired to introduce himself to the lovers of singular fruits. He was a queer genius, always striped; did not boast of giving quantity, but his quality he felt was always worthy the palate of amateurs. On inquiry, I found this last speaker was a foreigner under the name of *Gloire des Sablons.*

As he sat down, *La Hative de Bertin, La Fertile d'Angers, Fruitful of Palnan* and many others were rising to speak, when the President said the time was growing short, and no matter what others might think, he was decidedly in favor of giving our dark colored brethren a chance for themselves. These were times when old rules must be broken; and the prejudice many persons had to the odor of his dark friends was fast dying away, in a just appreciation of themselves, and the good qualities that some of his dark skinned brethren possessed. He would ask the Black Naples for a few words.

Whereupon a currant as black as if just arrived from Ethiopia arose, and said he had long struggled in this country against a taste possessed by many persons, but this was passing away as he became more and more a citizen of the whole Union. In England he had for years and years been well received, and here no person who had once had him and expressed his juice into jelly, then used him in cases of sore throat, bronchitis, influenza, etc., etc., would ever again feel reconciled to be without him. He desired to say he had a friend called Black Grape Currant, that he considered a close rival, and hereafter he hoped the spirit of the people would be to give him or some of his brethren a chance to exhibit their good qualities, by placing them in their gardens.

The Black Grape here got up, but as I had a long ride before me, I had to leave the Convention while he was speaking, so that I fear his remarks as well as those of others of the reds and whites are lost to the public. Possibly another Convention may be held this coming summer, when of course I shall attend and make notes. E.

For the Ohio Cultivator.

The Lady Apple.

This beautiful little dessert apple is highly esteemed in New York where it is much sought for by the ladies to embellish their tables on New Years day,—at evening entertainments—and dinner parties,—and always commands a high price.

Fruit very small, flattened, skin smooth pale yellow, with a brilliant, red cheek, flesh white, firm, crisp, juicy, pleasant.

Tree of slow growth, forms a very upright small head, fruit produced in pairs or clusters along the whole length of the branches, very ornamental.

Succeed well throughout the west. Season Dec. to May. A. G. Hanford.

Columbus, Ohio.

Acknowledgement.—With the above came a dish of the brightest, cunningest, juiciest little apples we ever saw: as bright as a bevy of little rosy cheeked girls at a Sunday school festival, and as toothsome as baby kisses; as crisp and juicy as a red Astrachan in August, and a good deal sweeter. Let every orchardist have a few trees of the Lady Apple just to please the girls.—Ed. *Field Notes.*

Kentucky Game Law.—The game law passed at a former session of the State Legislature, for Campbell county, has been made a State law at last. It prohibits the killing of all birds smaller than quail, except snipe or plover, under a fine of $1 to $15 for each offence; and also prohibits the killing of any game between the months of April and Sept., under the same penalty.

Home Department.

MRS. FRANCES D. GAGE, EDITOR

For the Ohio Cultivator.

The Way to Health.

A friend in Boston, writes me: "We saw Mrs. T,—of Cuba, yesterday, whom you visited on that beauiful Island, she is attending Mr. Lewis' Normal Institute, and was in her gymnasium dress, which was made of a red flannel waist, fastened into a belt, with plain linen bosom and collar, a gray skirt coming just below the knee and trimmed at the bottom with plaid; pants like the skirt. It was very graceful and pretty."

Mrs. T—is a beautiful and highly-cultured woman, near fifty years of age. She had lived in Cuba twenty-two years, when I saw her, and walked with her through the grounds of the old bishop's palace, and sat with her upon the rare old walls in the Jesuit's walks, listening to the music of the palms above our heads, and breathing in the fragrant aroma of the yellow jasmines and sweet scented convolulus that crept over the decaying walls and through dying hedges. I thought I had seldom known a woman whose thoughts were more elevated, or whose hopes of humanity were more buoyant and holy. She was then suffering with neuralgia, and now comes to our bleak New England, and to the active exercises of a Gymnasium for health and strength. May she find them abundantly.

Ah! there are many of our suffering women that need the moral courage to defy fashion and idleness, to rid themselves of aches and pains.

F. D. G.

For the Ohio Cultivator.

Our Faded Cousins.

They came walking up the path together, our cousin Mattie and her husband. He walked beside her, tall and stately, and just as handsome as ever—wore his wedding coat with the first gloss not rubbed off yet, the high collar as high as ever, and the long dangling proclivities overlapping at the ends. The dear fellow! looking as if fed on oil cake five times a day, and groomed as many more—quite like a bridegroom yet!

And she, Mattie, who used to say she meant to grow old gracefully, and be good looking at sixty, came hustling along as though trying the tripping step, carrying a rollicking baby, and leading another. "Gracefully," indeed! I should not have known her if I had not been expecting them. Her complexion was sallow and cloudy, her forehead wrinkled, her hair thin and spread out to "make believe" that it was luxuriant, her nose looked pinched and white, and her bloodless lips set together with a screw, till her mouth looked more like a scar than the rosy, open, glad mouth that used to ha! ha! out so merrily, when we rambled in the green wood and swung on the wild grape vines. Her lips parted in a dry rustling laugh as she wilted down into a rocking chair, and gave the clamorous baby a good tug at her life. And *this* was my best beloved cousin! this faded, shrunken, pallid thing my once blooming Mattie!

He carried on a large farm, had a good many hired hands. It took a good deal of hard work to raise grain and stock enough to sell and pay off the rest of the heirs, so he could get to keep the old homestead; and it took a great deal of work in-doors to take care of the old folks, and tend the children, and do all the cooking and washing and housework.

They had been married eleven years, and had only seven children — the little twin boys, just alike as two peas, they only lived a few hours, and they buried them below the garden, among the willows. And the

mother, as though her poor back could have borne a heavier burden—used to go and sit and weep there, whenever *he* or grandpa or poor querulous grandma happened to speak too harshly to her. It was a relief for her to sit there among the shadows and cry softly, and bow her head over the turfy spot!

Poor cousin Mattie! one only among thousands! How *can* they grow old *gracefully*, good shade of Hannah More! In the morning there is no time to rest, and pray, and gather up strength and smiles sweet charity and serene thoughts, to help one on through the day. Noon comes, and they unlade the big dinner pot, flying hither and thither as they see the hands of the clock reaching up towards twelve,—hoping *he* will be pleased with the fare. What time then, is there to muse, and think of the duties we owe God and our families and our neighbors, and how obligatory it is that she all the time be sweetly serene. At night the tired limbs fall into bed, thankful for rest,—the last thought perhaps will be, "Is there bread enough for breakfast," or "I do hope the yeast will prove good," or "Oh there! I forgot Ned's pants!"

Sometimes, if there be bread enough and all things right—all troubles off the mind, she will have time to think, just as she glides off mistily into sleep—"How like to death sleep is! How easy I could die!" though she don't *mean* to die at all, hasn't time to think of it, mus'nt for the little brood's sake!

And so live and die the poor, poor Matties. None of them have time or opportunity to grow old gracefully; they sink into scowling shadows, and who's to blame, or who can right the great evil, and give to the world graceful and loving, and serene-faced, sweet old women? ROSELLA.

Mrs. Thorn's Sorghum Cake.—One pint of sour cream or buttermilk, one half teacupfull of butter or sweet lard, one pint of sorghum molasses, one egg, one teaspoonfull of soda, two of creamtartar, or two table spoonfuls of good cider vinegar; mix in a batter, pour into pans, and bake in a quick oven. F. D. G.

How to Cure a Cold.

The moment a man is satisfied he has taken cold, let him do three things:

First, eat nothing; second, go to bed, cover up warm in a warm room; third, drink as much cold water as he can, or as he wants, or as much hot herb-tea as he can; and in three cases out of four he will be almost well in thirty-six hours.

If he does nothing for his cold for forty-eight hours after the cough commences, there is nothing that he can swallow that will, by any possibility, arrest the cold, for, with such a start, it will run its course of about a fortnight in spite of all that can be done, and what is swallowed in the meantime in the way of food, is a hindrance and not good.

"Feed a cold and starve a fever" is a mischievous fallacy. A cold always brings a fever; the cold never beginning to get well until the fever subsides; but every mouthful swallowed is that much to feed the fever; and but for the fact that as soon as a cold is fairly started, nature, in a kind of desperation, steps in and takes away the appetite, the commonest cold would be followed by very serious results, and in frail people would be always fatal.

These things being so, the very fact of waiting forty-eight hours gives time for the cold to fix itself in the system; for a cold does not usually cause cough until a day or two has passed, and then waiting two days longer gives it the fullest chance to do its work before any thing at all is done.

Intelligent druggists know that all medicines sold for coughs, colds, consumption, and tickling in the throat, contain opium in some form or other. They repress the cough but not eradicate it; hence the first purchase paves the way for a second or a third; meanwhile, as it is the essential nature of opium to close up, to constringe, to deaden the sensibilities, the bowels do not feel the presence of their contents calling for a discharge, and constipation is induced and becomes the immediate cause of three-fourths of all ordinary ailments, such as headache, neuralgia, dyspepsia, and piles.

Warmth and abstinence are safe and certain cures when applied early. Warmth keeps the pores of the skin open, and relieves it of the surplus which oppresses it; while abstinence cuts off the supply of material for phlegm, which would otherwise have to be coughed up.—*Hall's Journal of Health.*

Poetry.

For the Ohio Cultivator.

The Angel.

BY DON LLOYD WYMAN.

The sky is dark and the air is keen,
The ground is white with a fall of snow;
No more the tender violets blow,
Nor lilies under the warm winds lean;
'Tis night without and night within;
My soul is heavy with fear and sin.

With bare brow smit by the icy breath
Of Æolus, far in the frosty north,
I stand in the midnight; looking forth,
I see o'er the desolate sleep of death,
Low in the west, the young moon stand;
A gold bow dropped from the Centaur's hand.

I look to the heavens to find content,
Yet not into Heaven, I fear, I fear!
Ah! God, illumine the cloudy sphere
Of mine eye, and hew in the sheer ascent
To thee, a few rough steps wherein
My feet may cling in the flight from sin.

An angel sat in a hellish town;
Around him reveled a noisy crew
Of drunken devils who raged and threw
Him curses and taunts despite his crown,
And, though he prayed with a tongue divine,
They bade him drink of the festal wine.

My soul is he who sat in the street
Of the cursed town, and though he strive
With desperate strength, the teeming hive
Of demons drags him at their feet;
And, maimed of spirit and bound of hand,
He prays release from the horrid band.

The darker the night the brighter the stars,
Yet a single star in a turbulent night
Of storm and horror, may lose its light
Ere it force a way through the prisoning bars
Of the clouds, that hover within the dark
And drown the rays of the alien spark.

I cling to the slippery cliffs in fear,
Yet, over-leaning the golden rails,
A sinless, serious face unveils
And reaches a hand to me; Ah! dear
Is the clasp of Hope, and wondrous fair
The glorious God who heard my prayer!

Perry, Feb. 1862.

Cookies.—Three quarters of a cup of butter, one quarter of a cup of sour milk or cream, one cup of sugar, and one egg; flour enough to roll.

Fried Potatoes, No. 1.—Boil your potatoes, and when cool, slice them; season with pepper and salt, have ready some hot melted butter or fresh lard in a pan, and fry a light brown.

For the Young Folks.

For the Ohio Cultivator.

The Old Green Parrot.

Here we are again—George, Minna, Stephen, James, Anna and Dick—every one in their places; and bless me, if here is not all our little cousins beside: Tommy, Eddy, Susan, Will, Jacob and Lottie, Birdie and Pet. Ha, ha! how glad Auntie is to see you all; give them the best place, children; little Pet's chair right here at my feet, while I tell her all about Madame Fannies's old green parrot.

It was in the old city of St. Domingo, where Madame Fannie lived. There they never say as we do in this country—Mrs. Somebody; but they speak of a lady by her Christian name. Pet's mother is Mrs. Lucy Smith; if she lived in the city of St. Domingo she would be Madame Lucy. If Madame Fannie was here, we should call her Mrs. Fannie Labo, but there she is Madame Fannie.

"Tell me about the green birdie." So I will darling, but wait a minute. Madame Fannie was the funniest woman you ever heard of. She was almost as small as little Dollie Dutton, but not quite. Uncle John who was with me in the Islands, used to tell her she must put her thimble in her pocket when she went out, to keep the wind from blowing her away. She was seventy years old; but she could run about like a squirrel, and dance and sing like a little child. When she was talking she would make her head, body and hands go, like a deaf and dumb person. She had an old parrot named Peto, that she said was older than she was, that was always walking about the house, climbing over the chairs, or roosting on the jealousies, that is the iron gratings that are before the windows, and peeping out of one eye, at all that was going on. He never spoke to any one but Madame, but they would talk French by the half hour together. Parrots are green when they are young, but as they grow old they change color, and their feathers are covered with little golden spots about

as large as pin heads, green and gold, with red rims round their eyes. He was a beautiful old fellow, and as saucy as he could live.

Madame Fannie always set my meals by myself, and I ate all alone, for Uncle John had gone to the mountains. One day a colored woman (nearly all the people there are colored,) made me a present of a nice chicken, and Madame Fannie said I must cook it *my way*, and so I did, and then I asked my little landlady and her husband to dine with me.

Oh! but wouldn't you like such a dinner! not the chicken, you would not care for that, but one good negro gave me a pile of oranges, another a pineapple, and another some tamarinds, and then I had bananas and nespels. How nice it was! But what I was going to tell you was how Mr. Peto behaved. Madame and Monsieur (that is the word for Mr.) usually ate down stairs, but to-day they were to eat at my long table in the great hall above.

Peto always stood on the table by the side of his mistress' coffee cup, but she thought it would not be polite to bring him to my table, so she gave him his china plate filled with cracker, orange, pineapple and cocoa cake, on a chair beside her. Now what do you think he did? He got very angry, bristled up his feathers, and swore bad words at his dear good mistress; he would not touch a bite, and before she knew what he was about he took his big claw and poured his dinner all over the floor, and threw his plate down and broke it all to pieces. Such a beautiful plate too, it was, with a green parrot in the centre, eating a golden orange.

Madame scolded him hard, and threatened to put him in the closet, and then he crawled down to the floor, and got under the table and put his head under his wing and cried just like a naughty child, and sobbed and snuffled, and flirted his feathers, till we almost cried, cried a laughing.

Monsieur Labo tried to set him on his chair again, but he just drooped his wings as if he was dying, and when he set him on the floor he pitched about like a hen with her head cut off. At last Madame Fannie began to talk to him in French, and this is what she told me she said:

"Peto you are very bad, very bad indeed, Monsieur Peto, and I does not like you at all one bit; and if you does not do better as you do, I takes you and puts you under de box, and I keeps you dere all the dark nights and you shall nevare see the big moons a shining or the stars or the fireflies, you naughty, bad bird! But if you bees good, makes me a bow, and does not swear any more like a garcon, then I will gives you good coffees and crackers, and you may eat one grand dinnare with the white ladie, Madame Fannie de Gage."

Peto seemed to understand every word, for he righted himself on his feet, walked off to Madame's chair, reached up to the first round, climbed the back, stepped off on to her left shoulder, walked straight over her head, let himself down to her right shoulder, turned and put his crooked beak into her beautiful earring and gave her ear a pull that made her scream again, and then he chuckled and laughed, as he walked down her right arm and stepped off on to the table, and put his bill into her coffee, and threw the cracker upon her beautiful white damask table cloth.

Madame had to coax him with every good thing on the table before he would look pleasant. He made her put three big lumps of sugar in his coffee, after that he ate his dinner, made his bow, said *au revoir!* to us all, let himself down by the corner of the table cloth to the floor, walked out on to the balcony, and was soon fast asleep on a branch of a great blooming oleander.

Was he not a funny bird?

AUNT FANNY.

God heals and doctors take the fees.

Mary's mouth costs her nothing, for she never opens it but at another's expense.

A change of fortune hurts a wise man no more than a change of the moon.

When prosperity was well mounted, she let go the bridle and tumbled off the saddle.

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AIKEN GRAPE.

The best Black Grape of its Season.

THE ABOVE-NAMED GRAPE

WAS BROUGHT INTO THE WEST About twenty-five years ago, by a German just from the "Faderland." I have watched its character for many years, and have found it a very productive bearer; bunches, large; berries, very large, round, and very compact in the cluster, glossy black, sweet and delicious. It *never mildews*, and *always ripens its fruit one week to ten days* sooner than the Isabella. I have now for sale a few hundred Plants, which I offer at the following low prices, in order that so good a grape may be in the hands of all. The vines have all been grown in the open air. For 1 year-old plants $10 per 100; 25 cts. each, or 5 for $1. 2 year-old, $15 per 100; 37 cts. each, or 3 for $1. 3 year-olds, $20 per hundred; 50 cts. each. Orders will be filed as received, and those first received will be first filled, but no plants will be sent out till April.

F. R. ELLIOTT,
f8 Cleveland.

CATAWBA GRAPE ROOTS!

FOR SALE, 10,000 CATAWBA Grape Roots, one year old, at $3.25 a hundred, or $30 a thousand.

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MARKETS.

The Produce and Grain Markets are quiet but prices are firm at the slight advances hitherto noticed, so that we need not repeat quotations.

The Cattle Market has been looking up for two weeks as our full reports by mail, published below from a New York paper will show.

The storm and ice upon the wires have prevented the receipt of our telegraphic market reports from N. Y., so we are unable to give the prices of Live Stock for this week.

New York Live Stock Market.

BEEF CATTLE.—The supply is somewhat short but the deficiency in numbers is partly made up by the heavier weights and better quality of the bullocks; the quality is very good for this season. An unusual number of cattle was sold yesterday, leaving comparatively little to be done on this the recognized market day of the week. The state of the supply indicated half a cent advance, but we think the price for the same grades were only ¼c. above the previous market. There is considerable dressed meat still coming in, and butchers would not submit to any material advance in rates. Taking the entire sales of this week, the range of prices has been about as follows:

	This Week.	*Last Week.*
Extras	9¼@10c.	9¼@ 10c.
First quality	9 @9¼c.	8¾@ 9c.
Medium to good	8 @8¾c.	7¾@8¾c.
Poor quality	7 @7¾c.	6¾@7¼c.
Poorest quality	6 @6¾c.	5¾@6¼c.
General selling prices	7¼@8¾c.	7¾@8¼c.
Average of all sales	8 @8¼c.	7¾@ 8c.

The closing rates were scarcely different from the above average for the whole market. Of the 3190 cattle brought in last week, 2879 were yarded at Forty-fourth street, and these came last from the following localities, namely: 773 from New York state; 603 from Illinois; 601 from Ohio; 257 from Kentucky; 334 from Indiana; 96 from Iowa; 74 from Michigan; 51 from Canada; 36 from Connecticut; 34 from Pennsylvania; and 30 from New Jersey—a wide pasture ground surely.

SHEEP are abundant, and 25c. per head lower. The prices are equivalent to 4 to 6c. per lb. live weight, the best going readily at 5¼ to 5¾c. A few large fat Cotswolds sold at $20 to $25 each. They were of extra size and fatness.

LIVE Hogs are in limited supply this week, but there are so many dressed animals, that prices have advanced but ¼c. to ½c. per lb. Stock all sold; the corn-fed hogs at 3¾c. to 3¾c., and still hogs at 3¼c. to 3¾c. per lb. live weight.—Receipts are lighter than for any previous week since last October.—*Methodist.*